JUNE 1960

CONCRETE

EDITORIAL DEPT

SHO LET ST INC

SHO LET ST INC

EDITORIAL DEPT

IF YOU NOW OPERATE A HIGH PRODUCTION MACHINE.

GET AT LEAST 500 MORE BLOCKS PER DAY

(NO CHANGE IN QUALITY)

THAT'S 100,000 EXTRA BLOCKS IN 40 WEEKS -ON A SINGLE SHIFT, 5 DAY WEEK.

HOW? Just by switching to a GOCORP "Super" TRUSTEE.

WHY? The vast majority of high production block machines being sold today use almost exactly the same vibration system as GOCORP. So, let's not kid anybody, if the aggregate, cement content and other conditions are equal, each requires exactly the same number of seconds of vibration time to produce the same quality. The difference is in the time required for the other motions in the cycle. The modern hydraulic drive of GOCORP's "Super" TRUSTEE cuts from one to one-and-a-half seconds off these mechanical motions when compared to the other machines mentioned above. So, change to a "Super" and you can cut at least a full second off your total cycle and STILL KEEP EXACTLY THE SAME TIME FOR VIBRATION.

FOR EXAMPLE:

- If you are now running a 11.5 second cycle, you're producing at a rate of 939 blocks per hour . . .
- « Switch to a "Super" and you can cut the cycle to 10.5 seconds WITHOUT REDUCING VIBRATION TIME
- Your new production rate will then be 1029 blocks per hour . . .
- AND, all blocks will be as good or better than the ones you are now getting-No changes in mix or aggregate.
- 90 more blocks per hour than you are now getting.

MAGIC? That's right-hydraulic magic. The "Super's" simple, effortless hydraulic drive completes all other motions faster. This allows a greater portion of the cycle for vibration and-all other factors being equal, the number of seconds for vibration determines the strength of the block. (see next column)

Sure, you can shorten the cycle of your present machine and get the increased production, BUT NOT WITH-OUT SACRIFICING COMPRESSIVE STRENGTH AND ADDING TO YOUR CEMENT COSTS PER BLOCK OR RISKING AN INCREASED PER-CENTAGE OF CULLS AND HIGHER MAINTE-NANCE COSTS.

"SUPER" TRUSTEE NO FASTER MACHINE ON THE MARKET!

ALSO

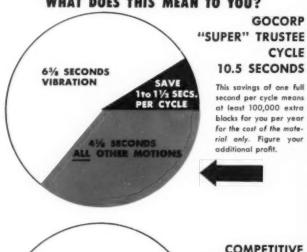
- "Special" TRUSTEE-many features of the "Super"
- 2X and 21/2 X TRUSTEE Thrifty Models
- · RACKMAN Automatic Loaders and Unloaders-Synchronized or detached
- · Mixers, Skips, Cubers, Offbearers and other allied equipment

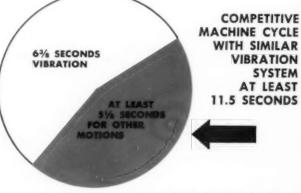
CHECK FOR YOURSELF!

With a GOCORP "Super" TRUSTEE all mechanical motions can be completed in $4\frac{1}{8}$ seconds with the balance of the cycle devoted to vibration.

If you are now operating a competitive machine with a similar vibration system, get out your stop watch and check your vibration and total cycle times. We'll wager if you subtract your vibration time from the total cycle, you will have a balance of at least 51/8 seconds for other motions—A conservative full second wasted.

WHAT DOES THIS MEAN TO YOU?





In a series of tests recently conducted for us by Professor Edwin L. Saxer of the University of Toledo, it was proved conclusively that each time the vibration time was reduced by one second, compressive strength dropped about 100 p.s.i. A complete copy of the six page report on these tests will be mailed to you promptly on request.

GET THE FACTS, and may we strongly suggest you get them for yourself before you purchase your next machine. If you do, your choice will be a "Super' TRUSTEE.



405 Grace St., Adrian, Michigan . Phone COIfax 5-7165 . CABLE ADDRESS: "GOCORP"



NEW --- developed specifically for the concrete industry, a special Hand Cleaner that solves three industry problems:

- 1. REMOVES CEMENT . . . without abrasives and without harming the skin, quickly removes cement even that which is ground into pores along with oil, grease and other soil.
- 2. ENDS DERMATITIS ... contains a special skin antiseptic to kill resident bacteria which contribute to dermatitis and secondary infections.
- 3. PROMOTES HEALING . . . provides lanolin to promote healing, prevent chapping and protect the skin from lime and cement which are natural irritants.

Edick Hand Cleaner won't cost you an additional cent if you are already furnishing soap for your washrooms! The same money or less will buy this industry designed product with all its benefits.

ORDER TODAY - GET THE BENEFITS YOU ARE PAYING FOR ALREADY



\$2.75 per gallon Packed 4 two gallon cans in a case.

FREE INTRODUCTORY OFFER

Ordering now on the coupon or your purchase order will entitle you to a FREE wall bracket and dispenser valve.

(\$2.00 value.)

OPDER	COLLBOX

Mail to:

EDICK LABORATORIES, INC.

2358 South Burrell St.

Milwaukee 7, Wisconsin

Please send me a FREE bracket & dispenser and —— case(s) EDICK HAND CLEANER.

Co.

Address

City ...

Signature

State ...

EDICK LABRATORIES, INC., 2358 South Burrell Street, Milwaukee 7, Wisconsin

CHEMISTS FOR THE CONCRETE INDUSTRY

Columbia 1960 SUPER 12 A BIG FAST RUGGED 3 BLOCK MACHINE

...designed for the plant that demands dependable, day-after-day high production with a minimum of maintenance.

Capable of 8 cycles on 8" equivalents, the completely automatic electronically controlled and hydraulically powered SUPER 12 has many other advantages that mean greater per block profit for the plant owner.

BOLTED CONSTRUCTION...

All component parts of the SUPER 12 are jig drilled and precision machined to assure perfect alignment and allow for easier and faster field service, maintenance and installation.

HEIGHT CHANGES . . .

The SUPER 12 can be changed over to produce half heights in 30 minutes or less.

MOLD CHANGES ...

Molds to produce block of other types, the same height can be changed in 15 to 20 minutes.

NEW "HIGH FREQUENCY" VIBRATION ...

Powered by a special 10 h.p. motor equipped with a new trouble-free spline Warner brake, higher speed controlled direct vertical vibration is obtained in the SUPER 12.

CUSHIONED CYLINDERS ...

Compression and Feed Drawers Cylinders are oil cushioned to prevent shock.

PLUS...built-in Hydraulic unit...Teflon packing...Feed box with interchangeable liners, bolted so any part can be changed in the field...fully automatic Density Control ... newly designed interlocked - controlled Electronic system . . . streamlined for safety and easy clean up, etc. THE SUPER 12 MAY BE PURCHASED IN BOTH 8" AND 12" HIGH MODELS ON EASY PAY-AS-YOU-DEPRECIATE TERMS. THE SUPER 12 CAN BE ADAPTED TO **USE MOLDS FROM** MANY OTHER BLOCK MACHINES Home Office: 107 Grand Blvd., Vancouver, Washington Branches: Mattoon, Illinois; Burbank, California Manufacturers and world-wide distributors of a complete line of plant equipment for production of concrete products

CONCRETE

For producers of concrete block, precast and prestressed concrete products and ready mixed concrete

Published Monthly By Concrete Publishing Corp. • 400 W. Madison St., Chicago 6, III. • Central 6-8822

Vol. 68, No. 6 Est. 1904

Donald T. Papineau

Publisher

Jack Anderson

Editor

Advertising Representatives

Midwest:

Dwight Early & Sons, 221 N. La Salle St., Chicago 1, Ill. CEntral 6-2184,

Eastern:

Porter Wylie & Co., 114 E. 13th St., New York 3, N.Y. GRamercy 5-3581.

Western:

Crawford L. Elder, 2500 El Venado Drive, La Puente, Calif. OXford 4-4116.

New England:

Clarence L. Morton, 294 Washington St., Boston 8, Mass. Llberty 2-8538.

CPMB Standards	Published											4	20	0
													_	

New standards to end confusion in ready mix plant equipment are published this month; aimed at defining degree of automation of equipment.

Now under study in South, ties are expected to cut replacement cost, give better uniformity, simplify maintenance, use easier fittings.

News 5

The Cover:

A 100' single tee is being lifted from a form at the new Maule Industries prestress plant. This photo is one of those mentioned in a news story this month on a Maule display.

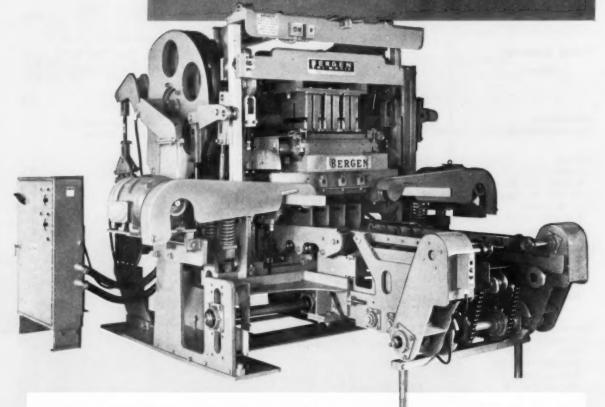


Circulation Audited and Verified by The Verified Audit All correspondence and editorial material should be addressed to Concrete Publishing Corp., 400 W. Madison St., Chicago 6, Ill. All ad plates should be sent to Concrete in care of Wayside Press, Mendota, Ill.

Subscription Price: \$6.00 for one year, \$11.00 for two years, postpaid. No subscriptions accepted for longer than two years. Single copies, 50 cents. Copyright 1960 by Concrete Publishing Corp. Accepted as controlled circulation publication at Mendota, III.

The NEW 12" HIGH BERGEN TRI-MATIC

will improve your competitive position



This fast, hardworking new block machine is designed primarily to put more profit in block making. Its rugged construction and precision-built components enable the Bergen TRI-MATIC to produce — uithout strain — uniformly high quality blocks at rates exceeding 1,000 — 8" equivalents per hour, with the use of proper aggregates. This machine makes a full range of block sizes up to and including 12" high.

The new 12" high Bergen TRI-MATIC is years ahead in meeting the industry's needs for more dependable, low-cost production of top-quality blocks. It will put you far ahead of your competitors! Investigate the advantages of the new 12" high Bergen TRI-MATIC—NOW.

Write for further information.



Machine and Tool Co., Enc., Diskley, N. J.

Bergen manufactures a complete line of Block Plant Equipment—Batch Mixers, Skip Hoists, Off-bearing Hoists, Height and Density Conital Panels, Mold Repair Tables, and a full line of mold attachments and replacement parts.

News

Va. RM Group Elects Williams

The Virginia Ready Mixed Concrete Assoc. recently elected Mel S. Williams, Roanoke, as president. Other new officers are John Tuohy, Norfolk, vice president; Don L. Williams, Ripplemeade, secretary-treasurer.

A-M Buys Madison Silo

American-Marietta Co., Chicago, has purchased the Madison (Wis.) Silo Co. for an undisclosed price. The company will become part of A-M's concrete products division.

New Autoclave Dept. Set Up by NCMA

A new department of NCMA to be known as the "Autoclave Building Products Department of NCMA" was announced by Max H. Miller, president of NCMA.

The new Autoclave Building Products Department will serve a segment of the industry which produces a specially cured concrete block.

A staff executive to head the new department will be announced later, according to Walter W. Underwood, executive director of NCMA.

Buehner To Open Denver Precast Plant

Otto Buehner & Co., of Salt Lake City, has announced plans to open a Denver plant for the manufacture of precast units. With the announcement of the new plant came the naming of J. Nisbet Marye, Denver construction engineer, as plant manager.

Marye said the company plans to acquire an existing Denver plant or to construct a new one. For the past seven years Marye has been vice president of the Mack Precast Products Co., Adams City, Colo.

Poudre Pre-Mix Opens in Ft. Collins

Poudre Pre-Mix, a new Fort Collins, Colo., firm, began business in early April with a new automatic plant on a two acre site. Plant owners are Glen Chandler, O. J. Warner and Blair Kiefer. Kiefer also owns Kiefer Concrete Co.

New Block Plant Planned in Asheville

A new \$250,000 block and products plant will be built in Asheville, N. C. by Concrete Products Co. of Asheville. Completion is expected by late summer. The present plant of the 11 year old firm will continue in operation for some time yet, company officials say.

The firm produces decorative block, split stone, drain tile and a line of building materials.

D. B. Moore is president and general manager of the company.

Louisiana Assoc. Elects Emile Reggie Pres.

The board of directors of the Louisiana Concrete Association has elected Emile Reggie of Crowley as president.

P. J. Voorhies, Lafayette, was elected vice president and C. W. Barry, also of Lafayette, was named secretary-treasurer.

Prestressed Promotion Film Available



A new film explaining the principles and uses of prestressed concrete has been made available for free public showing by Calaveras Cement Co., a Flintkote Division.

The film, narrated by Prof. T. Y. Lin (shown above) of the University of Calif., covers the history and future of prestressed concrete, in addition to describing its present applications. The viewer is shown construction jobs where prestressed units are being installed, as well as representative plants where prestressed units are made.

The 22 minute, color and sound film is titled "Prestressed Concrete". It may be obtained on loan from Calaveras Cement Co., 315 Montgomery St., San Francisco 4, Calif.

Meet the ALL-NEW

CURTISS-WRIGHT

HAWK

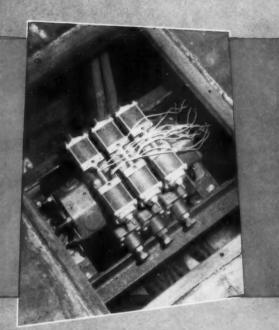


NEW and SMOOTH



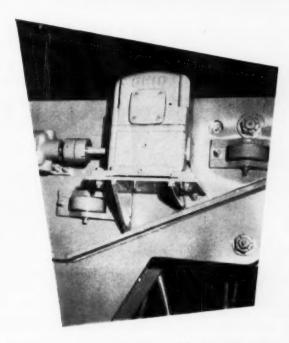
LOADER and UNLOADER

The all new Curtiss-Wright Hawk is designed to provide every feature that block handlers want in a loader-unloader. That is why the new Hawk is by far the best performing, easiest operating machine in the field. Call your Hawk distributor today. Let him show you what high block moving production really is with the all new all-ways-better Curtiss-Wright Hawk.

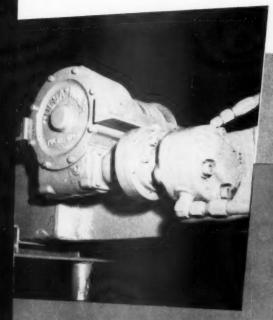


HYDRAULIC STACK VALVE ASSEMBLY IS EASILY ACCESSIBLE THROUGH PLATE IN TRUCK BED.

- Retractable boom for fast load placement even under the most adverse conditions.
- New boom length for increased distance of load placement
- · Full hydraulic system for easy, trouble-free operation.
- Remote and built-in control stations for operating convenience.
- · Pitched bed for shift-free load carrying.
- · Completely self-contained unit for easy mounting.
- · Available for the largest selection of trucks.
- · Easily accessible hydraulic flow and pressure controls.
- Economical, one-man operation.
- · Clean, space-saving design.
- Complete set of clearance lights and reflectors built into bed.
- Strong, rigid beam and channel frame bed, built for maximum strength and minimum weight.
- Strong grill cab guard prevents damage to truck.

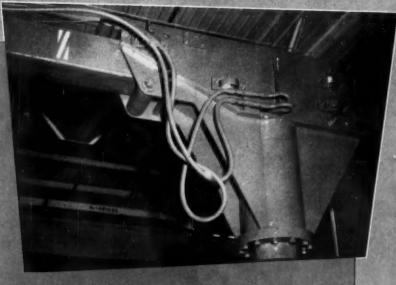


EXCLUSIVE HAWK HYDRAULICALLY POWERED RETRACT-ABLE BOOM MAKES LOAD PLACEMENT EASY.



HYDRAULICALLY POWERED, WORM GEAR DRIVEN WINCH PROVIDES SAFE, SMOOTH OPERATION — LOWERS 15 FEET BELOW GRADE.

HEAVY DUTY CONSTRUCTION OF HEAD, TYPICAL OF ENTIRE UNIT, ASSURES LONG MAINTENANCE-FREE MACHINE LIFE.





SOUTH BEND DIVISION CURTISS-WRIGHT CORPORATION SOUTH BEND, INDIANA

It's Logical

that builders should prefer concrete to steel lintels (which entail complications and greater cost.)

Logical

that you should be able to produce and sell this additional profitable item without increase in your present sales force.

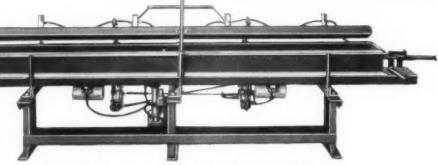
It's Logical

that most of your present customers should be interested in concrete lintels of the quality you can

It's Logical

that concrete lintels-as a new profitable item-should "open doors" that have been closed to you up to now.

MAKE FORMED LINTELS, SILLS, ETC. THAT MATCH YOUR BLOCKS WITH A KENT LINTELATOR



ECONOMICALLY PRODUCE LINTELS

7 1/8" high, in 3 1/8", 5 1/8", 7 1/8", 9 1/8" and 11 1/8" widths . . .

UP TO 10' 8" IN LENGTH *Longer Lengths on Special Order.

IN TEXTURES TO MATCH YOUR BLOCKS

ASSURE YOURSELF of selling blocks for commercial buildings, churches, schools, etc., by being able to sell lintels that blend with your blocks.

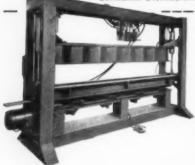
STOCK the popular sizes and offer to supply special sizes on 24 hours notice.

FOR DETAILS of these profitable, profit expanding machines write

The KENT MACHINE CO.

CUYAHOGA FALLS, OHIO · Subsidiary of The Lamson & Sessions Company **Concrete Products Machinery Since 1925**

Canadian Distributor: Wettlaufer Equipment, Ltd., 49 Merton St., Toronto 12, Ontario



AND FOR ultra fast, extra profit production of lintels purchase

THE KENT HYDRA-LINTELATOR

Makes lintels up to 12 feet or in multiples under pressure and vibration with texture to match your blocks. Head and mold box operated hydraulically.

THOROUGH UNIFORM COMPACTION assured by four

weight motor driven vibrator that is adjustable in intensity for different aggregates.

Eye level controls assure fast and convenient operation. Write for special literature.

News

Richard Frazier Named Campbell Research Dir.

Richard J. Frazier, former vice president in charge of production and research director for Anchor Concrete Products, Inc., has joined Harry T. Campbell Sons' Corp. to head up a new research department.

Campbell recently merged with Flintkote Co. Frazier will direct research in new product development. new uses for present products, and manufacturing technique improvements for Campbell at their Towson, Md. headquarters.

NRMCA Short Course November 14-18

Stanton Walker, director of engineering for NRMCA, has announced that the 15th annual short course will be held Nov. 14-18 at the University of Maryland.

Walker asked that no registration applications be made at this time; forms will be mailed about July 1 to members, he said. At that time, information on the course, hotel information, and number of registrants allowed would be given.

Lafarge Takes Option on Anglo Canadian

Lafarge Cement of North America, Ltd., has reportedly taken an option on stock of Anglo Canadian Cement Ltd., a ready mix operation. Lafarge recently purchased the Deeks-McBride Ltd. firm in Vancouver, B. C. Anglo Canadian is in the same city.

The announcement of the Lafarge option was made by Anglo vice president and general manager W. C.

According to another report, Lafarge officials are considering buying Anglo but hadn't yet come to a final decision. The option reportedly was to expire May 16.

New Concrete Firm in Winchester, Kv.

The formation of a new firm, Concrete Material Corp., in Winchester, Ky., has been announced by J. Scott Talbott Jr., vice president-general manager.

The firm has purchased the plant and equipment of Winchester Ready Mix. J. B. Allen is president of the new corporation, and G. C. Fluty Jr. is secretary-treasurer.

Elkhorn RM Plant

Gerhold Concrete Products Co., Columbus, Nebr., has purchased the Elkhorn Ready Mix Co. at Norfolk.

Bought by Gerhold

Nebr., according to James Gerhold.

For the first time in its 54 year history, the Autoclave Building Products Assoc. has chosen a Canadian president. He's John S. Wheeler. president of the Ontario Building Materials Ltd., Toronto. Wheeler was elected at the annual convention in Atlanta early in April.

John S. Wheeler

Autoclave Assoc. Elects

First Canadian Pres.



Russell B. Gulick, 62, manager of the Glenside Lumber and Coal Co. ready mix plant at Glenside, Pa., died April 23 at his home.

J. J. Satow Dies

John J. Satow, 62, secretary of Universal Sewer Pipe Corp., and secretary of the U.S. Concrete Pipe Co., died April 16 at a Cleveland, Ohio hospital. He was a resident of Parma, Ohio.

Maule Shows Facilities to Engineers



Delegates to the 1960 Florida Engineering Society convention got an overall look at Maule Industries' new precast-prestressed facilities through the display shown above. A 6x8' aerial photo mural showed the overall operation, with detailed photos showing various parts of precast-prestress manufacturing.

News

Jones Re-Elected Pres. of Nebraska S, G & RMCA

Everett R. Jones was re-elected president of the Nebraska Sand, Gravel & Ready Mixed Concrete Assoc. at the group's first annual convention in Lincoln.

Other new officers elected are Vayden Anderson, vice president; Harold C. Kelberg, re-elected secretary-treasurer.

Minette Elected Pres. of Berthelet Fuel

Ray W. Minette has been elected president of the Berthelet Fuel & Supply Co., Milwaukee. He succeeds the late Louis A. Fons, Sr.

At the firm's annual meeting in April, Alois Fons was elected vice president and I. R. Morland was elected secretary.

RM Plant Being Built Near Morton, III.

Construction has begun on a \$200,000 ready mix plant, near Morton, Ill., for the Morton Ready Mix Concrete Co. The plant, on a 6 acre site, will have a daily capacity of about 700 cu. yds., with push-button automatic operation.

President of the company is Oscar J. Mathis, with Mike Laukitus as vice president and Sam Ackerman as secretary-treasurer.

Barnett's Plan Prestress Plant

An 11 acre site will be used for the manufacture of prestress units by Barnett Bros., Inc., a Henderson, Ky. firm, according to B. U. Barnett, co-owner.



Mrs. E. F. Olsen Dies

Mrs. E. F. Olsen, wife of Eugene F. Olsen, died April 21 at St. Mary's Hospital, Rochester, Minn., after a short illness. Mr. Olsen is the founder of the Gene Olsen Corp. in Adrian, Mich.

Funeral services were held April 23 in Adrian, with burial in Oakwood cemetery.

Gertrude Lewis Olsen was born Sept. 20, 1896 in Cassville, Wis. Shortly after her birth, the family moved to East Dubuque, Ill., where she received her elementary and high school education. She also studied vocal music at a Chicago music institute and was on the brink of a professional music career when she married Mr. Olsen in Chicago in 1922.

Mrs. Olsen was very active in local Adrian civic events, including the DAR, the Kappa Kappa Epsilon sorority, the garden club, American Legion auxiliary and other groups.

Mrs. Olsen is survived by Mr. Olsen; one son, Gene D.; two brothers, a sister and two grandchildren.

Ennis RM Plant Sold to B. J. McLaughlin

The Ennis (Tex.) Ready Mix Concrete Co. was recently sold by L. M. Doty to B. J. McLaughlin, Dallas highway and street contractor. Products of the plant will include ready mix, septic tanks, lightweight block and Holiday Hill units, according to the report.

Construction Showcase Going Up in Dallas



A central showcase for the construction industry is being built in Dallas, Tex., with groundbreaking planned on July 4. The center, known as Fleetwood Square and pictured above, will have Fleetwood Tower, an office-exhibit building, Fleetwood Terrace, a theater-auditorium, and Fleetwood Fountains, a plush restaurant.

The restaurant will be of free-form roof style, built of concrete and glass. The Tower building will have permanent displays of construction materials and methods in a showroom. Planned as a construction center, Fleetwood Square will have facilities for trade shows, sales meetings and exhibits.

BETTER CONSTRUCTION THROUGH BETTER USE OF CEMENTS

news and notes from the field

Overcoming the Problems of Hot Weather Concreting

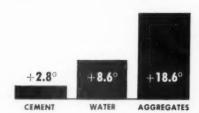
Hot weather can be made to work for you in concreting-if certain precautions are observed during placing. The dangers of inadequate preparation be-fore placing, high MIX temperatures and poor curing protection should be understood and controlled.

Effects of High Temperatures

High temperature accelerates the setting time of concrete and promotes rapid evaporation of moisture. The setting time is based on mix and curing temperatures of 73°F. As the temperature rises the setting time accelerates. When the temperature of the concrete is allowed to climb too high, there is danger of "quick set" and permanent strength damage.

What causes High Concrete Temperatures?

The temperature of fresh concrete is affected by the temperature of the materials and the mixing conditions. Take an average five bag mix and increase the temperature of each ingredient 30° The graph below shows how much each affects the concrete temperature.



What Happens When Temperature of Fresh Concrete Runs Too High

- Permanent strength reduction
- Early stiffening or quick set
- Increased water requirements
- Increased probability of cracking

with hose or fog spray.

Ways of Reducing Mix

Temperature:

- 1. Sprinkle hot aggregate stock piles
- 2. Apply fog spray to aggregates or conveyor belts.
- 3. Use crushed ice in the mix replacing water-pound for pound.
- 4. Avoid stock-piling aggregates directly in the sun. 5. Protect mix-water storage and lines
- from direct sun. 6. Avoid the use of strength accelerators in hot weather.

Tips For Best Results



1. Subgrade should be damp (not muddy) so it will not absorb water from concrete.

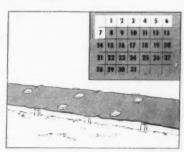


2. Have adequate help available to handle concrete rapidly.

- 3. Discharge MIX as soon as possible after proper mixing.
- 4. In extremely hot weather it may be necessary to shade concrete or use wet coverings until final finishing can be completed.



- 5. In hot dry breeze erect wind break or use fog nozzles on upwind side of fresh concrete.
- 6. Start curing operations as soon as concrete has set enough to avoid surface damage.



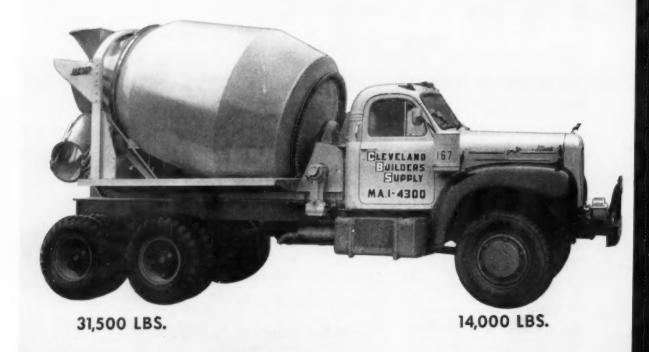
- 7. Cure concrete for at least 7 days where durable wearing surface and strength are important.
- 8. Keep test cylinders shaded and damp until they are ready to be sent to laboratory after 24 hours.

Reprints Available

If you would like free reprints of this helpful information on Hot Weather Concreting, contact your local Alpha representative or the Alpha Portland Cement Company, Easton, Pa.

RTLAND CEMENT COMP

Alpha Building, Easton, Pa.



MAKES 6 YD. PAYLOAD LEGAL EVEN ON 1941/2" WHEELBASE, HEAVY 4-WHEEL-DRIVE MACK

GVW of 7 yd. "Short Base", with 6 yds. of 4050 lb. concrete and 100 gals. water, on B426 FX Mack, is

45,500 lbs. "Short Base" mounting makes it legal with 31,500 lbs. on bogey and 14,000 lbs. on front.

JAEGER "SHORT-BASE" gives legal axles with rear load farthest forward on short trucks

- Up to 281/2" shorter between mounting points than any other mixers.
- Eliminates the cause of frame distortion.
- Makes 7 yds. safe as well as legal loading on short trucks.
- 6, 61/2 and 7 yd. sizes flywheel or front-of-engine pto.

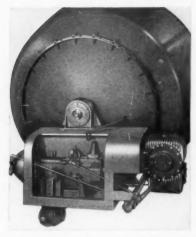
Ready mixed plants are now demanding truck mixers to haul 6, 6½ or 7 yards legally on maneuverable short wheelbase trucks. But even with pto drive and minimum cab-to-mixer spacing, most truck mixers are still too long between front and rear support points to give proper load distribution on short truck frames. The load on the bogey may be legal, but it is applied too far back on the truck frame, making bowing and frame distortion a widespread problem.

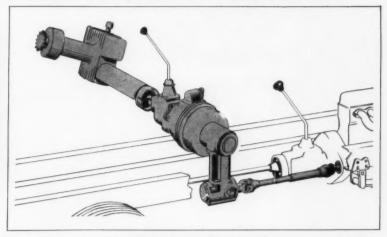
JAEGER "SHORT BASE" GIVES IDEAL MOUNTING

Compare the front-to-rear support dimensions of the Jaeger with other mixers. Jaeger's short, large diameter drum, with drum rollers cantilevered beyond their cradles, locates the rear load 10¼" to 28½" farther forward on the truck frame. All models of Jaeger truck mixers provide this closer mounting. Jaeger's Model FS "Short Base" units combine it with minimum cab-to-mixer spacing made possible by pto drive. Ask your truck dealer about the importance of this "short base" mounting—or write for our Specification TMS-O.

(For 6 or 6 ½ yd. models deduct 13 ½ " or 7") Jaeger 128 ½ " Mixer B 138 ¾ " * Mixer C 141 ¾ " Mixer D 145 " Mixer E 157 " *Large diameter track and cantilevered rollers on low cradles minimize frame stress. **Mixer closest to Jaeger extends 10 ¼ " farther back

YOUR CHOICE OF REAR OR FRONT OF ENGINE PTO





JAEGER STANDARD TRANSMISSION: Provides Jaeger multiple speed selectivity with rear-of-engine as well as front pto — 1½ to 16 rpm drum speeds with any type truck engine. Keeps drum within desired speed range when truck is accelerating between 0 and 40 mph.

DUAL CONTROLS: Operate drum and truck engine throttle from cab and from ground at both front and rear of mixer. Can declutch while traveling.

JAEGER REAR-OF-ENGINE PTO: Best and simplest for all trucks with full torque pto adaptor between engine and clutch. Needs only a short splined connecting shaft below and inside the truck frame provided truck engine adaptor conforms in alignment with fixed truck mixer adaptor. The latter is coupled, through master mixer clutch, with standard Jaeger synchromeshed reversing, multiple speed transmission.





JAEGER FRONT-OF-ENGINE PTO

Adaptable to front pto of any standard gasoline, diesel or LPG powered truck. Horizontally-split dustproof alloy steel case, heavy duty notched belt and sealed ball bearing shafts. Sheave centers adjustable for belt tension. Crossbraced bumper protects assembly.

Drive shaft is outside truck frame — easy to lubricate and inspect — standard automotive parts throughout.

JAEGER AIR-PRESSURE WATER TANK

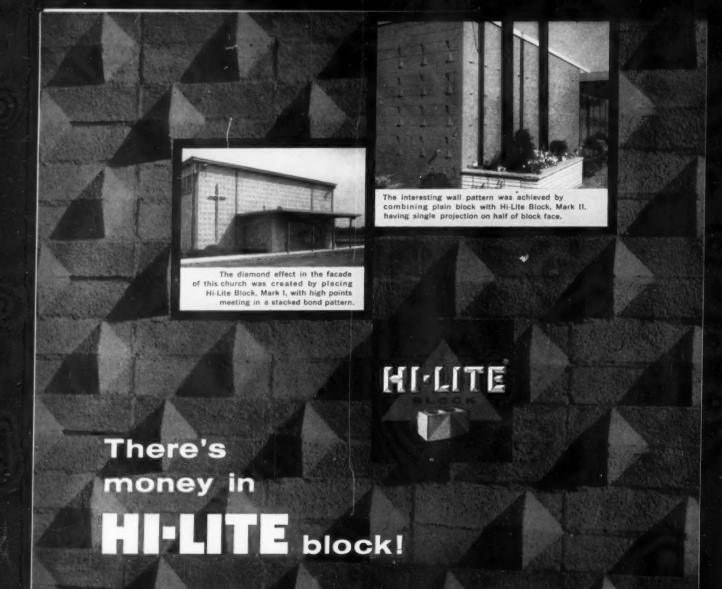
Mounts on side or overhead, is operated by truck's compressed air system, eliminates need for water pump. 75-100 gallon single compartment ASME tanks with sight gauge and all necessary safety equipment. Truck air compressor of 12.5 cfm capacity is ample for operation.

THE JAEGER MACHINE COMPANY, 522 Dublin Avenue, Columbus 16, Ohio

Jaeger Machine Company of Canada, Ltd., St. Thomas, Ontario

Worldwide Sales and Service Through JAEGER International Corp., Apartado 137, Panama, R.P.

AIR COMPRESSORS • PUMPS • CONCRETE MIXERS • CONCRETE SPREADERS • FINISHERS



Many Vibrapac users are banking it right now.

are you? Single- and twin-pyramid Hi-Lite Block, Mark I and Mark II, appeal to the imagination of architects and designers. They see Hi-Lite Block as a dramatic dimension that achieves a feeling of depth in walls, instead of flatness... excitement, instead of monotony.

Buildings on the drawing boards in your area are a potential market for thousands upon thousands of Hi-Lite Block! Someone's going to get this profitable business, Shouldn't it be you?

The only special equipment you need to make Hi-Lite Block are five BESCO Hi-Lite outside division plates. Using these in any standard mold, you can produce Hi-Lite Block from lightweight or dense aggregates as fast as regular block, without any production problems. Ask your Besser representative to send in your division-plate order right away, so that you can start enjoying extra Hi-Lite profits soon. Write for free wall chart of Hi-Lite Block design patterns.



HI-LITE BLOCK IS NATIONALLY ADVERTISED

BESSER Company, Dept. 127, Alpena, Michigan, U. S. A.
First in Concrete Block Machines
*Design

Quotes

Informal news concerning people, plants and products

An Army researcher has found a way to bond glass fibers to concrete, a discovery that may open the way for use of glass fibers in reinforcing and prestressing. The Army man, Solomon Goldfein of the Army Engineer Research & Development Laboratories at Fort Belvoir, Va., has actually developed several different methods. One is by use of an epoxy resin coating to bind the fibers together and bond to the concrete. Another boost for the method is the development of glass fibers with a higher modulus of elasticity, to be near that of steel; previous fibers had a m. of e. about a third that of

The fibers would be used mainly in special construction where corrosion resistance and other factors are important. Evidently the cost would be too high for routine work.

Some sabotage of ready mix plants-with no apparent reason so far—has been taking place in Mon-mouth County, N.J. Sugar was put in the gas tanks of trucks of two ready mix firms, Campbell Concrete Co. in New Shrewsbury and Matawan Concrete Co. A fire, believed incendiary in origin, damaged Eatontown Concrete Co. offices. And a trucking firm also was damaged apparently by arson-caused fire. The three concrete firms, all part of United Materials Corp., don't believe the sabotage was done by either unions (since there's no trouble) or by cranks. At last report, no one was commenting on the cause, although there were indications that the companies knew the reason but didn't have enough proof as yet.

Some more cheerful news, in the reporting of the many new plants or plants busy expanding: First, A. Pollera & Sons of Inwood, L.I., New York, are well along with their expansion program that now includes plants at Inwood and Sayville. The Inwood modernization included a new Lithibar Imperial model 420, block cuber and other equipment.

Additional automatic equipment for making block and other products has been put in at Mattox Concrete Products, in Chillicothe, Ohio. Latest buildings added include one that's 55x80' for precast, and a 55x100' building for block; a new block machine went into the latter. Two new tandem trucks have been added, one with an unloader. Also, Mattox has added a line of builders supplies. All in about the last year.

Not new, but reorganized, is a Shreveport, La., firm, Coastal Plains Concrete Co. The company was formed following the dissolution of Coastal Plains Supply Co. of Dallas; with this company also being reorganized as Coastal Plains, Inc. P. W. Gifford, of Dallas, heads both firms. The Shreveport plant will expand its line of ready mix, building materials and concrete accessories. The Dallas firm is in equipment and machinery. Charles G. Thompson is vice president-general manager at Shreveport.

The Illinois secretary of state has granted a charter to the Clinton Concrete Products Co. to build a ready mix plant in Clinton. Incorporators are William F. Jeschawitz, Jr., Pauline V. Jeschawitz and William Miller.

New bins, an Imperial Lithibar 420, and other equipment are new at John Potente & Sons, Hicksville, L. I., New York, we hear, as part of an expansion program. Cesspool block and other units including manhole covers form the company production.

A three-block machine, to replace a single block unit, has been planned at Oskaloosa (Iowa) Concrete Products Co., a firm founded only last July. New mixers, bins, conveyor, two more drying kilns, and color for the product are also in the plans. Ted Overbergen is plant manager in charge of production, with Kenneth Bailey the president.

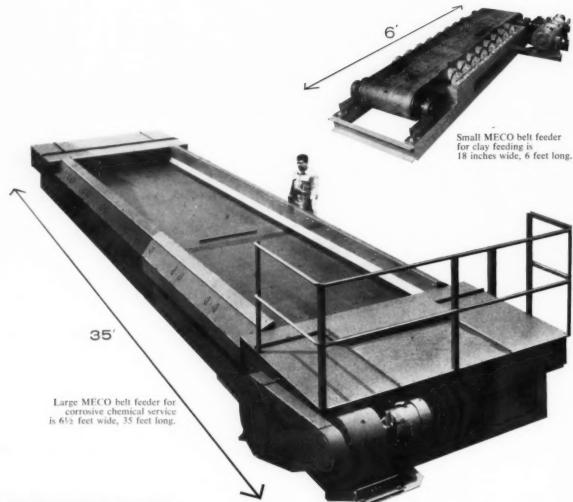
Iowa Concrete Products Co., in Ames, has bought 10 acres of land in or near Cedar Rapids, as the site of a new plant. The company already has plants in Des Moines and Hampton.

R. H. Wright, Inc., roof and floor slab maker in Fort Lauderdale, Fla., has added 18" deep double tee slabs to their line. Wright, a Houdaille Industries subsidiary, is aiming the new units at long span construction in multi-story buildings.

Marian and William Baiotto have bought Hayden Concrete Products Co., in Kirksville, Mo., from the previous owner, Vernon Fogleman. The company name will be changed to Baiotto Concrete Products. An expansion will put in a new block making machine. The company, in ready mix also, has 8 truck mixers.

The Durox plant being built at a site near St. Paul, Minn., is getting well underway. Five carloads of equipment, from Sweden, arrived in late March for plant construction in Washington county. Both the Durox process and most of the equipment originated in Sweden.

Strawberry Point (in Iowa) has a new ready mix operation. Earl Continued on page 33



MECO engineered belt feeders precise feeding for optimum profits

Of all the ways to feed bulk material, none offers the precise control plus other economic advantages of a MECO engineered belt feeder. It's the new equipment that progressive plants are investigating—and buying—to make all other equipment work at the most profitable capacity.

First, MECO belt feeders can offer infinitely variable speed control, even while operating. Feed rates can be adjusted automatically, or manually if you desire, from a few inches to many feet per minute.

Second, MECO belt feeders let you move materials direct from live bottom bins and hoppers. Because the opening can be as large as desired, there are no bridging problems. You can feed from the tallest silo—or if you are planning new construction, you can specify the largest possible storage facilities.

Third, MECO belt feeders reduce spillage and product contamination, improve housekeeping. Moreover, their rugged, heavy duty construction and simplified design cut maintenance to the bone.

MECO makes every type of feeder—apron, plate, disc, and belt—for an impartial recommendation, you can trust MECO's 50 years of experience. Request Bulletin 601 from The Manufacturers Equipment Company, 218 Madeira Avenue, Dayton, Ohio.

MECO

ENGINEERED BULK MATERIALS HANDLING EQUIPMENT



Concrete Ties Getting First Big Test

Among advantages of new ties are durability, low maintenance, uniformity, less replacement, new fittings, wider spacing that permits reduction of ties-per-mile.

For years railroad men have been pondering the feasibility of developing a concrete crosstie economical enough to ease the annual burden of maintaining more than a billion units.

In April, two quarter-mile test sections of prestressed concrete crossties were opened to main line traffic by the Seaboard Air Line Railroad and the Atlantic Coast Line. The move should answer some penetrating questions about cost and performance,

The first of these "twin" installations, located on Seaboard Air Line main line track near Tampa, was officially opened to traffic on March 9. The Atlantic Coast Line installation near Benson, North Carolina was scheduled for completion soon thereafter.

While no claims will be ventured until both sections have been extensively field tested, the sponsors of these "ties of tomorrow" believe they could make history. In addition to the two railroads, the Association of American Railroads and the American Concrete Crosstie Corporation, Tampa, Florida, also figured prominently in the unveiling of the new concrete "Tie E".

The fifth of a series of experimental designs, "Tie E" was developed by Research Engineer, Structures, E. J. Ruble under the direction of G. M. Magee, director of engineering research for the Association of American Railroads.

One Big Question

Since the SAL and ACL officially dedicated both test sections at Tampa on March 9, normal traffic has been rolling over the concrete ties toward the solution of one all-important question:

Can the prestressed concrete tie economically meet the load bearing requirements of main line traffic? The history of conventionally reinforced concrete ties was not an overwhelming success mainly because they could not withstand extreme variations in temperature under the loads and stresses imposed by U.S. rail traffic. The search for a truly adequate rail fastening device for concrete ties also hampered development of a tie which would pass the acid test of day-to-day use.

With the advent of prestressing, and air-entrainment of concrete, (and increased use of continuous welded rail), the way was finally paved for practical designs. Finally, the added weight of the concrete ties is expected to provide an element of stability by securely holding the line and surface of rails.

Lab Research

In a sense, history and necessity joined forces at the AAR Research Center in Chicago in late 1957. It

Continued on next page



View shows the fastening arrangement used with new concrete ties.

Concrete Ties

Continued from previous page

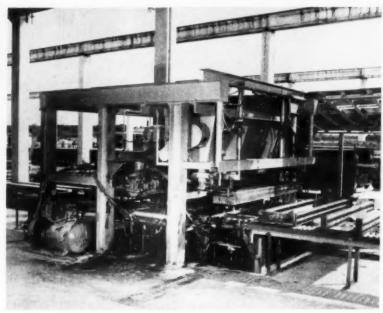
was then that research on new concrete tie designs moved from the drawing board to the testing laboratory. Figuratively at least, that move was accompanied by rising maintenance costs and a growing scarcity of quality timber. It was also characterized by concentration on the design of a concrete tie that would not only make the best possible use of materials but also effect the most efficient transmission of track loads to ballast.

Now, after almost three years of testing five different designs, "Tie E" will offer a real sounding board for fact and theory. More than 500 ties will be installed in each completed test section.

They weigh approximately 540 lbs.; are 8 ft., 6 in. long and 7 in. deep. The design of "Tie E" differs from conventional wood ties since it features a 12 in. bearing surface at the tie ends and tapers to a 9 in. width at the top of the tie. This additional load-carrying area permits wider tie spacing with no more than a 10% increase in rail bending stresses when 132 lb. rail is used. Wider spacing means the number of ties per mile of track can be reduced from approximately 3,178 to 2,112.

Wider Spacing

This reduction is possible since prestressed ties can be spaced 30 in. from center to center as compared with usual spacing of 20 in. from center to center.



This machine, to produce the ties, has capacity of 1,000 ties per day.

While "Tie E" is similar to conventional ties when viewed from the top, it incorporates radical departures from typical designs. Viewed from the bottom, "Tie E" has a 3 ft. wedge-shaped center section with a 2 in. bearing surface. Concaved ends were also designed to "hold" supporting ballast. The tie is pre-stressed by four 7/16 in. diameter uncoated stress relieved 7-wire strand with a maximum ultimate strength of 250,000 psi and a 75% initial prestress of 187,500 psi. The concrete is designed for minimum compressive strength of 4,000 psi at time of initial prestress and a minimum compressive strength of 6,000 psi at 28 days. The mix contains Portland cement, Florida sand, granite coarse aggregate, water and air-entraining

Now that both test installations are open to traffic, performance will nat-

urally be closely checked. A few of the prestressed ties will be placed under 39-ft. panels of bolted rails placed adjacent to welded sections so that comparisons can be made. And in addition to construction and maintenance records, strain gauge measurements with oscillograph recordings will be obtained to determine dynamic stresses under traffic. Riding qualities and noise levels will also be the objects of scientific curiosity.

The American Concrete Crosstie Corporation has taken a giant step in the direction of economical production with the development of a tie making machine which can produce 1,000 units per day. In just 26 seconds the new machine feeds, prestressing cable cut to exact length then places the cable in a specially developed form while it is under a tension of 82,000 lbs. This load is

Continued on page 31



This building is the same shown on last month's cover.

Screen Walls In This Building Both Save Money and Add Beauty

In constructing the popular "suburban" type office buildings, the builder frequently has the problem of providing deluxe accommodations, keeping the "feel" of the suburbs, and holding construction costs down. And if the site faces the sun, there are also the problems of heat and glare control.

This is what faced builder Henry L. Wheeler when he made plans to build a 7,200 square-foot professional office building on a corner lot in the new professional-business district of San Diego. Because af the new location of the main thoroughfares, the front of the building had to face south and east — into the direct rays of the sun.

Wheeler took the design problems to his brother, Richard George Wheeler, A.I.A., a prominent San Diego architect. The solution worked out by the brother team turned out to be practical, economical, and an architectural "first" for San Diego.

Their answer was an attractive concrete block screen wall entirely covering the front of the building. The wall was set at the edge of a spacious overhang permitting walkways and second-story balconies to be built behind the screen wall.

Final design included seven 18foot-high screen wall sections covering both the south and east exposures. Hazard "Empress Screen Bloc," a light sophisticated pattern that allows good light transmission and air circulation was selected. Final touch was a spray coat of flat white masonry paint.

Instant Success

When the \$200,000 construction project was finished in September of last year, its success was instantaneous. The dramatic beauty of the concrete block screen walls proved to be a traffic-stopper, especially at night under bold roofline lighting.

Connecticut General Life Insurance Co. became the first principal tenant of the six-suite building, quickly followed by top-notch mortgage lenders, realtors and accounting firms.

Pointing out some of the advantages of the use of scren block, Wheeler said that sun and wind control were of primary importance, but some of the additional benefits turned out to be equally important from the standpoint of renting the space.

Most important, he said, was the dramatic attractiveness of the building. In addition, because the actual building walls were protected from the sun, air conditioning costs have been drastically cut.

The 2-story building itself is of frame construction, set on a masonry block foundation. Wheeler says the design of the structure was basically simple, permiting savings in construction costs. Money saved this way more than paid for the screening.

CONCRETE PLANT STANDARDS

Of the Concrete Plant Manufacturers Bureau

Adopted by the Concrete Plant Manufacturers Bureau on December 3, 1959. Approved by the Board of Directors of the National Ready Mixed Concrete Association on February 16, 1960.

PURPOSE

1. These Standards have been prepared for the information of users of concrete plant equipment. They have been established pursuant to Article VI of the Constitution and By-Laws of the Concrete Plant Manufacturers Bureau to describe and identify the products and combinations of products manufactured by members of the Bureau, and to standardize rated capacities, the basis for determining rated capacities, and certain other features of concrete plant components.

SCOPE

These Standards specify requirements for concrete plant equipment eligible to be designated as standard by the Concrete Plant Manufacturers Bureau.

CERTIFICATION

3. A copyrighted rating plate furnished by the Bureau shall be attached to each standard item of concrete plant equipment shipped by a member of the Bureau and certified by him as complying with these Standards. Each member of the Bureau shall execute annually a stipulation that rating plates have been and will be attached only to components which conform to these Standards, reading as follows:

"Our company hereby certifies that rating plates of the Concrete Plant Manufacturers Bureau have been attached during the year just ended and will be attached in the forthcoming year to all items of concrete plant equipment which conform to the Standards of the Bureau and only to such items."

This stipulation shall be signed by an authorized officer of the member company. Any member company shall furnish the Bureau, upon request, structural drawings, steel design computations and any other information pertinent to determining that items of equipment conform to these Standards.

EFFECTIVE DATE

4. These Standards, approved by the Board of Directors of the National Ready Mixed Concrete Association, shall become effective on March 1, 1960. Members of the Bureau shall attach rating plates to all equipment shipped thereafter and certified by them as complying with these Standards. Equipment shipped prior to the effective date shall not be entitled to a rating plate.

SPECIFICATIONS FOR EQUIPMENT

5. The following items of equipment are covered by these Standards and are eligible to have rating plates attached to them: batchers for aggregates; batchers for cement; batchers for water; bins or silos for aggregate; bins or silos for cement; bins or silos for the separate storage of both aggregate and cement; belt conveyors for aggregate; bucket elevators for aggregate; and bucket elevators and other types of conveyors for cement. Items of equipment eligible to be designated as standard shall conform to the applicable requirements given below.

a. BATCHERS. A batcher shall consist of a suitable container for weighing an ingredient for concrete. A combination of aggregates or a combination of cements may each be considered as a single ingredient. Aggregates and cement shall not be weighed in the same batcher. A batcher shall be equipped with a scale and also with the necessary mechanisms for its operation. All weighing equipment shall conform to the latest revision of National Bureau of Standards Handbook 44, "Specifications, Tolerances, and Regulations for Commercial Weighing Devices." Sub-sections (1), (2), and (3), which follow, describe separately, batchers for aggregates, cement, and water.

(1) BATCHERS, AGGREGATE. Aggregate batchers of the following rated capacities shall be considered standard and shall be required to have rating plates attached: ½, 1, 1½, 2, 3,

- 4, 5, 6, 7, 8, 9, 10, 11, and 12 cubic yards in terms of concrete to be produced in a single batch. The minimum volume of the batcher hopper in cubic feet, calculated as described below from dimensioned drawings, shall be equal to its rated capacity multiplied by 38. The volume of the batcher shall be calculated on two bases, the lesser of which shall govern, as follows: (a) based on an angle of repose for the aggregates of 30 degrees from the horizontal measured from the bottom of all filling gate openings; or (b) based on actual water level capacity.
- (2) BATCHERS, CEMENT. Cement batchers of the following rated capacities shall be considered standard and shall be required to have rating plates attached: ½, 1, 1½, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12 cubic yards in terms of concrete to be produced in a single batch. The minimum volume of the batcher hopper in cubic feet, calculated from dimensioned drawings, shall be equal to its rated capacity multiplied by 7, plus the following additions to allow for fluffing and variations in filling: For capacities of

1/2 to 1 cu. yd., add 3 cu. ft. 11/2 to 2 cu. yd., add 5 cu. ft. 3 to 4 cu. yd., add 7 cu. ft. 5 to 6 cu. yd., add 9 cu. ft. 7 to 12 cu. yd., add 12 cu. ft.

- (3) BATCHERS, WATER. Water batchers of the following rated capacities shall be considered standard and shall be required to have rating plates attached: 120, 240, 360, and 480 U. S. gallons. Scales for measuring the water may be graduated either in pounds or U. S. gallons, or both. The rated capacity shall represent the volume of the tank or the capacity of the scale, whichever is less. The minimum volume of the batcher tank, calculated from dimensioned drawings, shall be not less than its rated capacity. Any water batcher shall have a volume providing not less than 40 U. S. gallons per cubic yard of concrete to be produced in a single batch.
- (4) BATCHERS, MANUAL, SEMI-AUTOMATIC, AND AUTOMATIC. Batchers shall be designated on the rating plate as manual, semi-automatic, or automatic in accordance with the following requirements:
 - (a) A MANUAL BATCHER shall be equipped with gates or valves which are opened

and closed manually, with the accuracy of the weighing operation being dependent upon the operator's visual observation of the scale. The gates or valves may be operated by hand or by pneumatic, hydraulic, or electrical power assists.

- (b) A SEMI-AUTOMATIC BATCHER shall be equipped with gates or valves which are separately opened manually to allow the material to be weighed but which are closed automatically when the designated weight of each material has been reached.
- (c) An AUTOMATIC BATCHER shall be equipped with gates or valves which, when actuated by a single starter switch, will open automatically at the start of the weighing operation of each material and close automatically when the designated weight of each material has been reached, interlocked in such a manner that:
 - the charging mechanism cannot be opened until the scale has returned to zero;
 - (2) the charging mechanism cannot be opened if the discharge mechanism is open;
 - (3) the discharge mechanism cannot be opened if the charging mechanism is open; and
 - (4) the discharge mechanism cannot be opened until the designated weight has been reached within the allowable tolerance.

If different kinds of aggregates or different kinds of cements are weighed cumulatively in a single batcher, interlocked sequential controls shall be provided.

(5) BATCHING SYSTEMS. A batching system shall include a combination of aggregate, cement, and water (optional) batchers as described in the preceding and shall be designated as: manual; partially automatic; semi-automatic; automatic; or automatic with mix selection. A batching system which is completely interlocked shall not permit the batching of any

Continued on page 34



Adjustable Forms Speed Production At American-Marietta Prestress Plant

Unbatting ties permits the hinged steel form section to separate from beam.



Versatility is a key word in operations at the Lafayette, Ind., prestress plant of American-Marietta Company.

This concrete products division has been a major producer of concrete pipe for more than 30 years, and supplies 4 to 24-inch diameter concrete pipe and 8 to 114-inch diameter reinforced concrete pipe.

Prestress Beams

District production now includes prestressed concrete beams. The plant is equipped with four 230-foot long prestressing beds—one of which employs highly adjustable 10-foot section steel forms.

These forms help speed production of various sizes of box, ledger or haunched beams.

"The addition of prestressed concrete beam facilities to our plant also increases versatility of our operations," says Brice Bender, district engineer for American-Marietta.

The plant began producing beams shortly after it became a division of American-Marietta late in 1957. A-M engineers pioneered the first pretensioned concrete used for bridge work in the United States. Since 1951, the firm has supplied Amdek beams—varying in length to 113 feet—for more than 1,000 spans.

CONCRETE



Final concrete placement is being made, as soon as possible after first pour for concrete consistency within the beams.



U-shaped reinforcing bars at left are ready for positioning; at top center are bars being put into place, just back of fork.

yard concrete buckets. The beams are lifted by two 30-ton cranes.

The forms are usually in cast position 18 hours—although the hinged section could be removed in 4 or 5 hours. Tarpaulins cover concrete during the steam curing period. A crane moves the beam or beams from the form bed. Then excess prestressed cable is burned off. Exposed cable end areas are coated with tar to prevent moisture from entering the beam.

The forms, which Engineer Bender claims have "more versatility than any forms we've ever used," are positioned basically with a small tractor or lift truck. A crane attachment on the tractor lifts forms in individual sections or combinations up to 30 feet in length. One side of the forms is hinged, and positioned and fastened vertically with connecting pins—or at an angle, for beam removal, on flexible legs.

Bender says the steel forms "can be used without modification for various depths of box beams, and easily adapted for ledger beam production. Also, the forms could be changed to many other cross-section dimensional combinations."

Versatility of design led the Indiana plant to choose adjustable forms. They are used on one side of a double pretensioning bed, rated at 36 million inch pounds of tensioning force capacity. The bed handles 1½ million pounds of stress 2 feet above the soffit plate. Each of the beds—in parallel position—is serviced from a utilities trench; equipped with compressed air, steam, and electric facilities stations every 30 feet.

Individually Tensioned

Box beams precast in the steel forms, designed and made by Blaw-Knox, contain reinforcing bars, and from 29 to 50 strands of 3/8-inch diameter high tensile strength, stress relieved cable. These are individually tensioned through use of a 15-ton hydraulic jack. Drains, when specified, are fitted into the beams during concrete placement.

A 2 or 2½-inch slump concrete is employed to produce the prestressed beams at American-Marietta. Dense concrete is achieved through use of portable internal vibrators which eliminate air pockets. The concrete tests 4,000 psi 12 to 18 hours after the pour from two 1½-cubic-

EQUIPMENT and MATERIALS



New Automatic Cuber

A new, different automatic cuber, announced by Columbia, is said to form tight, compact, completely interlocked cubes that are automatically patterned to eliminate hand binding or other manual operations.

Each cube, as it leaves the machine, is easily accessible and ready to be picked up by the lift truck. For more convenient yard storage, cubes are formed to pick up either a full cube or half.

The new cuber is built to work with any type of off-bearing, but when added to the Columbia Automatic Rack Loader and Unloader, it's said to be the final step in all-inside automatic production of block. Block of 4 to 12" widths can be handled by the machine and may be assembled directly on the rollaway or automatically fed pallets. A motion picture showing the machine's operation will be shown on request.

Columbia Machine Co., 107 Grand Ave., Vancouver, Wash.

Enter R42 on Inquiry Card

New Rack Uses Replaceable Parts

With a new pallet rack developed by Adrian Steel, any part of the rack can be replaced by ordering from their catalog. The company has designed a knock-down, bolted constructed rack with removable shelf angles. Any rack can be quickly assembled (without jigs or fixtures) and any formed part needed can be ordered and replaced easily.

In addition, the maker is using a phosphatizing system prior to painting which is said to give a longer life to all rack parts. Racks for varying heights of block available on request, utilizing the replaceable angle features and other features listed above.

Adrian Steel Co., 906 James St., Adrian, Mich.

Enter R43 on Inquiry Card

Precast-Prestressed Units Shown in A-M Book

A new 12 page, full color brochure illustrates and describes American-Marietta's precast and prestressed concrete elements for custom designed industrial and commercial buildings. It's now available to architects, engineers, contractors, builders and the industry. Ask for AIA File No. 4-K.

American-Marietta Co., Concrete Products Div., 101 E. Ontario St., Chicago 11, Ill.

Enter R44 on Inquiry Card

Jaeger "Short-Base" Truck Mixers



New 6, 6½, and 7 yd. short-base truck mixers which locate the rear load 10¼" to 28½" farther forward on the truck frame to provide legal loading without frame distortion on short wheelbase, are being offered by Jaeger.

This shorter mounting is achieved by a short, large diameter drum which is mounted on drum rollers cantilevered beyond their cradles. This eliminates the bowing and distortion of truck frames experienced where the rear load is located too far back on the truck.

For example, the 7 yd. "Short-Base" Jaeger on B426 FX Mack, as illustrated, has a gww of 45,500 lbs, with 6 yds, of 4,050 lb, concrete and 100 gals, of water. The short-base mounting makes it legal with 31,500 lbs, on rear axles and 14,000 lbs, on front.

PTO drive, either flywheel or front-of-engine, makes possible minimum spacing between cab and mixer. Air-pressure water tank, either side or overhead mounted, is operated by the truck's air compressor. This eliminates need for a water pump.

The Jaeger Machine Co., Columbus 16, Ohio.

Enter R45 on Inquiry Card



New Central Mixer

T. L. Smith has announced the availability of a new three-yard Turbine central mixer for both ready mix and paving plants. The manufacturer claims that the Three-Yard Turbine is capable of producing 180 yds, per hour. Ease of installation and 54" charging height are two important features.

T. L. Smith Co., 2835 N. 32nd St., Milwaukee 1, Wis.

Enter R46 on Inquiry Card

Single or dual drive wheels are available; power steering is standard; standard cubing forks are 114" wide, 214" thick and up to 48" long.

Erickson Power Lift Trucks, 239 St. Anthony Blvd N.E., Minneapolis 18. Minn.

Enter R47 on Inquiry Card

Concrete Block Homes Plan Book Offered

"Modern Homes—Built Better With Block" is the name of a new book of 32 home plans designed especially for concrete block construction. Plans range from small 1000 sq. ft. homes to three or four bedroom 1800 or more sq. ft. homes. The plans are all new.

The books are available to block plant owners in any quantity at

wholesale prices; space on the cover for imprints.

Universal Plan Service, 1620 S. E. Ankeny St., Portland, Oreg.

Enter R48 on Inquiry Card

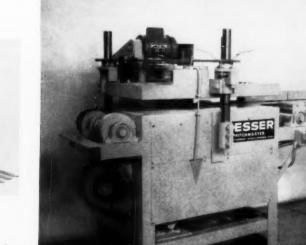
Cardinal Bulletin

Cardinal Scale has published a new bulletin (102) describing the line of Cardinal suspension hopper scales. The units can be made to customer's specifications to fit existing or proposed cylindrical, rectangular or square hoppers; with single or multiple batching beam units, and almost any type of automation. Dials, dials and printers, strip or chart recorders are available to the customer's requirements.

Cardinal Scale Mfg. Co., Box 151, Webb City, Mo.

Enter R49 on Inquiry Card

Pitch-Facing Machine Announced by Besser



Six Cylinder Engine on Erickson Fork Trucks

A six cylinder engine, said to give smoother power and greater power reserve, is featured on the new Erickson F6-W fork lift truck, which has block handling capacity of 6,000 lbs. at 24" load center.

The new engine is a Continental F-226, 226 cu. in. displacement, which develops 73 hp at 2400 rpm. The L-head engine has individual valve porting. Erickson has equipped the F6-W with a heavy duty Timken combination transmission and drive axle, providing direct drive with choice of four speeds forward, four for reverse.

A new pitch-facing machine, called the Pitchmaster, that pitches both edges of split block, brick or stone has been announced by Besser.

The machine will process all sizes of split block from 1-5%" high, up to full 9" high; in lengths from regular brick length to 23-5%" long block. It can be used, in the above height dimensions, on natural stone in any lengths up to 8' or more. The machine will process 3000 linear ft. per hour.

The machine pitches both edges of a unit in one pass through the machine; it also can pitch only one edge if desired.

Besser Co., Dept., S-333, Alpena, Mich.

Enter R50 on Inquiry Card

Cylinder, Watertight Concrete Books by MB

Two new publications are available from Master Builders. One is a guide to cylinder casting, showing approved procedures, correct sample taking, filling, handling and curing of cylinders. The one page guide is printed on heavy paper for durability. Bulletin RM-48.

The other publication, Bulletin P-49b, is a summary of information on the design and specification of watertight concrete; it tells how Pozzolith reduces shrinkage, bleeding and segregation to produce concrete that's highly resistant to water penetration under normal conditions.

The Master Builders Co., Cleveland 3, Ohio.

Enter R51 on Inquiry Card



Moisture Meter Uses Transistors

The Moisture Meter commonly used in ready mix plants has been transistorized to eliminate service and maintenance. The manufacturer, Sarasota Engineering, claims that the unit is now service and maintenance free. The new Transistor Mark X has the same features as the earlier tube models, including easy installation and the Memory dial.

Sarasota Engineering Co., Box 1329. Sarasota, Fla.

Enter R52 on Inquiry Card



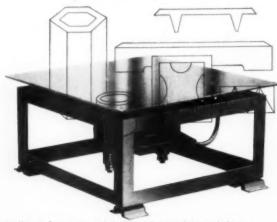
Assembly Drawings for British Drying Oven

Besser Technical Center has announced that free assembly drawings for fabricating the British Drying Oven are available upon request. The oven is described in the ASTM designation C426-58T, titled "Test for Drying Shrinkage of Concrete Block".

SYNTRON

VIBRATORY PACKERS

designed to compact and settle in forms and molds



—increase the use for concrete products by creating new designs and shapes, producing stronger, denser, smoother surfaces.

SYNTRON Vibratory Packers are designed to vibrate and settle concrete, eliminating air pockets and voids in all shapes of forms and molds.

Powered by SYNTRON's powerful electromagnetic drive with instant finger tip control of vibration assures the right amplitude for the mix.

Simplicity of design, fewer moving parts means longer service with less maintenance.

SYNTRON Vibratory Packers speed production, lower costs. tes for every application.



Write for SYNTRON Catalog data

NTRON COMPANY

324 Lexington Ave.

Homer City, Penna

Other SYNTRON Equipment of proven dependable Quality



BIN VIBRATORS



CAR SHAKERS



VIBRATORY FEEDERS

After two years of service the Besser people have found reliable temperature and electrical controls that are clearly itemized on the material list.

In addition, the BTC has an assembling drawing for a temperature controlled chamber for cooling the shrinkage specimen to 73°F.

Copies of the drawing can be obtained by writing for Drawings #209230, 209231, 209232, 211639 and 211640.

Besser Technical Center, Besser Co., Alpena, Mich.

Enter R53 on Inquiry Card



Name Plate Form

A new plastic name plate form can be used both as a money maker and a promotion tool. It can be used by pre-cast plants to identify their components, or by concrete plants to produce plates with the names of their masonry contractors. In the latter case, the plates can either be given away for promotion, or sold. Other uses, as for septic tank markers, are also possible.

The form produces 15.5/x7.5/xx-1.5/x" name plates with 11/4" block letters.

Zeidler Concrete Products Co., Clear Lake, Iowa.

Enter R54 on Inquiry Card

Jointing Tool

Gerson has developed a stainless steel jointing tool, both round and V'd style, permanently stamped with an advertising message. This is to be used for finishing joints between courses of brick or block.

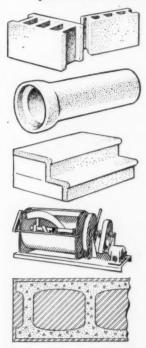
Gerson Co., 87 Deering Road, Mattapan 26, Mass.

Enter R55 on Inquiry Card

How Some Manufacturers Make BETTER Concrete Products at LOWER Cost, with FLY ASH

Fly Ash is a low-cost product. It is an extremely fine, wettable powder, mainly silica and alumina. Most of its particles are spherical in shape. It is a highly effective Pozzolan.

Many alert manufacturers, using a percentage of Fly Ash with the Portland cement, turn out a concrete of equal or improved qualities at a substantial saving in cost of materials.



Compressive Strength: Fly Ash Increases It

Many independent tests on concrete products made with a percentage of Fly Ash have shown equal or better 28-day compressive strengths as compared to those made with straight Portland cement. There is little or no reduction in 3-day strengths, especially where steam curing is used.

Sulfate Resistance: Fly Ash Improves It

Sulfate resistance is highly important in concrete sewer pipe. Tests on specimens of concrete containing a portion of Fly Ash showed greater resistance to the action of sulfate waters than did straight Portland cement concrete.

Finish and Texture: Fly Ash Makes Both Better

Comparisons show that concrete products made with mixes containing a percentage of Fly Ash have sharper edges and corners...smoother, more uniform surfaces...than products made with straight Portland cement.

Life of Machines and Moulds: Fly Ash Lengthens It

Fine, spherical particles of Fly Ash have a "ball bearing" action which increases flow and plasticity of the concrete and reduces abrasion. This means less wear on mixer blades, hoppers and moulds—longer life of your equipment.

Filling Moulds and Frames: Fly Ash Helps It

The greater plasticity of concrete containing Fly Ash reduces adhesion to pallets, and permits faster and more complete filling of moulds.

Fly Ash is Used in Carbonation and in Autoclaving

A drying cycle including carbonation after steam curing is finding favor in non-autoclave plants. Carbonation is more effective where up to 25% Fly Ash is used. In high pressure steam curing (autoclaving) a higher percentage of siliceous material is required than in ordinary steam curing. A blend of 50-50, cement and Fly Ash, by weight, has given excellent results.

FLY ASH improves Compressive Strength, Texture, Finish, Sharpness of Edges and Corners, and Uniformity of Color of the Concrete.

FLY ASH increases "Green" Strength, Resistance of the Concrete to Penetration by Water, and Resistance to Action of Sulfuric Acid and Sulfates.

FLY ASH reduces Cost of Materials, Maintenance on Wearing Parts, Sticking to Pallets and Moulds, Cracking in Handling of the Concrete.

Write for Information or Technical Help

It costs nothing to get the facts on Fly Ash; it might mean a great deal in the success of your operation. Contact any of the following for specific information and technical data on use of their Fly Ash of proven performance.

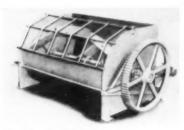
DETROIT EDISON COMPANY 2000 Second Ave., Detroit 26, Mich.

WALTER N. HANDY COMPANY, INC. P. O. Box 549, Evanston, Ill.

CHICAGO FLY ASH COMPANY 228 N. La Salle St., Chicago 1, Ill.

McNEIL BROTHERS, INC. P. O. Box 4015, Bridgeport 7, Conn. WEST PENN POWER COMPANY Cabin Hill, Greensburg, Pa.

MILWAUKEE FLY ASH, INC. 3815 N. Teutonia Ave., Milwaukee 6, Wis.



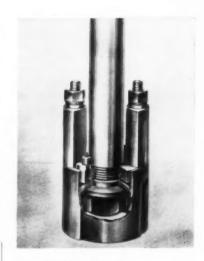
New Mixers Have Adjustable Paddles

A new line of concrete mixers features heavy liners in the bowl, replaceable when necessary, and the use of paddles instead of ribbon blades. The adjustable paddles can be set to give fastest mixing with minimum power; replacement costs are said to be half that of ribbon blades.

Other advantages are said to include all-steel plate, one piece construction; positive locking; discharge door operable from either side or right hand side of mixer; sizes from 15 to 60 cu. ft., with other sizes built to specifications.

General Engines Co., Route 130, Thorofare, N. J.

Enter R56 on Inquiry Card



New Packing Head for Denser Drain Tile

Greater density in drain tile is reportedly achieved through the kneading action of a new Champion packer recently introduced. Compressive strength, with the new packer head, is said to be up to a new high with absorption down to as low as 6%.

The densifying action, initiated by the shoes, is carried on by a newly designed shell which, in effect, is a combination of eccentrics, giving intermittent pressure that's graduated and in two directions, from the side as well as the front.

W. E. Dunn Mfg. Co., Holland, Mich.

Enter R57 on Inquiry Card

Booklet Reports Rack Corrosion Tests

The results of an 18 month corrosion test, comparing wrought iron and steel on racks at two block plants, are reported in a new 12 page booklet, "Corrosion-Resisting Concrete Block Racks".

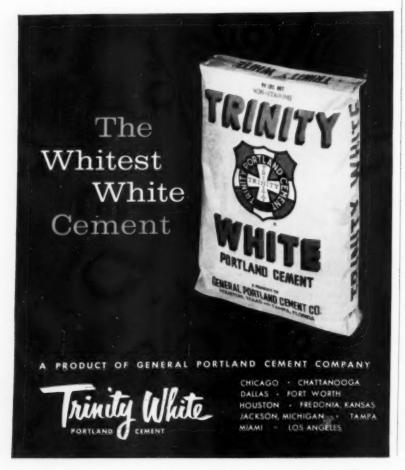
In addition, the book has working drawings and material lists for six standard rack designs, along with a suggested wheel assembly. The booklet compares initial costs and costsper-year of various types of metal racks.

A. M. Byers Co., Product Development Dept., Box 1076, Pittsburgh 30, Pa.

Enter R58 on Inquiry Card

Trinity White Portland Cement

Use it with Confidence-



Meetings

June 12-14, 1960

Annual convention, Florida Concrete & Products Assoc., Nassau Beach Lodge, Bahamas.

August 1-3, 1960

Lightweight Concrete Block Manufacturer's Conference, Chalfonte-Haddon Hotel, Atlantic City, N. J.

September 27-30, 1960

Annual convention, Prestressed Concrete Institute, Statler-Hilton Hotel, New York City.

October 3-5, 1960

Semi-annual meeting, board of directors, NRMCA, Del Monte Lodge, Pebble Beach, Calif.

December 5-6, 1960

Midwest Ready Mixed Concrete Assoc. Annual short course, Purdue Univ., Lafayette, Ind.

New Firm Organized by Hagerstown Block

The parent firm of the newly organized Martinsburg (W. Va.) Concrete Products Corp. is the Hagerstown (Md.) Block Co. A ready mix and stockpile operation at the new plant will be managed by Walter W. Cook, who has been transferred from Hagerstown. The stockpiling will be concrete products and block from the Hagerstown plant. James J. Meyers and his brother Vernon M. Myers are to operate the firm, the announcement said.

PCA Opens Office, New Region Setup

PCA has announced establishment of a new regional and a new district office, both now in effect. The states of Okla., Ark., La., and Texas are being joined in a new South Central region with headquarters at Austin,

A district office is being established at Albuquerque to serve the state of New Mexico.

Thomas D. Shiels, for five years district engineer at the Austin office, has been named South Central Region manager. Ted L. Edwards has been named to succeed Shiels as Texas district engineer.

Edward D. Thorson, who has been serving both Denver and the Rocky

Mountain region, will now serve full time as the regional manager in the Rocky Mountain Region.

Bernard C. Smith has been appointed the new district engineer for New Mexico, with offices at Albuquerque. Jack Barnes has been named to succeed Thorson as district engineer for Colo. and Wyo., with offices in Denver. Norman Baumgart has been appointed to succeed Barnes as district engineer for Mont., with offices in Helena.



CMA Elects Newport as President

The Spring 1960 convention of the Concrete Masonry Association, held March 31-April 3 at Alisal Ranch, was keynoted by John L. Goetz, Assistant Chemical Director of Southwestern Portland Cement Co. Goetz spoke on the physical properties of cement in his address to the block producers.

"Responsibility for the development and enforcement of proper tests, specifications and supervision rests on CMA and other progressive organizations," Goetz said, and, "The future of block is unlimited because of improved structural qualities as well as beauty of design and the many variable patterns available."

Following the opening address annual committee reports were made to the group by committee chairmen.

Special Projects Committee chairman, Arvid Johnson, advised the



Ray Clanton (left), outgoing president, presents gavel to Ivan Newport, new CMA president.

group that the electrical and plumbing details which this committee has been working on are nearing completion, with the plumbing detail now in the drawing board stage. These detail sheets on concrete masonry construction will be distributed to interested parties free of

Bill Grindle, of the Technical Committee, reported that this committee has overcome many obstacles which appeared insurmountable due to the active interest and participation of the membership in technical advancement.

Grindle stated the Quality Control Program now in effect under the auspices of the CMA Technical Committee is having far-reaching effects, with many organizations looking to CMA for protection in the maintenance of standards.

Outgoing President Ray Clanton, in his annual report to the industry, stated that the Quality Control program is the finest accomplishment of CMA in the past year and that it will stabilize as well as elevate the quality of industry products. As a result of this program, many specification writers are specifying CMA membership in their specifications, according to Clanton.

New officers for 1960-1961 were installed at the convention. President is Ivan W. Newport, Pre-Cast Concrete Products; Vice-President, Bill Grindle, Blocklite; Secretary, Ray Clanton, North Hollywood Concrete Tile Co.; and Treasurer is Wayne Chubb of La Mesa Concrete Prod-



Ready-mix operators everywhere are taking to the brawny, fast-charging Rockets' solid dependability and knack for cutting costs. You will too!

Longer Life, lower maintenance . . . because Rockets are crammed with extra "beef" to take all the slam-bang you can give 'em . . . and still come back for more, day after day, year after year. Rocket drums, for instance, have twice the welding normally found on other mixers. This and many other quality construction features mean lower maintenance costs.

Choose from a complete line of Rocket models in NRMCA approved capacities of $3\frac{1}{2}$, 4, 5, $5\frac{1}{2}$, 6, 7 and $8\frac{1}{2}$ cubic yards. Front Engine Drive or Flywheel P.T.O. optional.





30

Concrete Ties

Continued from page 18

then transferred to a portable pallet which casts and vibrates high strength concrete around the cable to form the tie. It then ejects the finished product onto waiting conveyor belts.

Although the average life of treated wood ties ranges from 25 to 30 years in some locations this service span is considerably shortened by unfavorable conditions.

In considering future application of prestressed concrete ties, most authorities agree that maximum utility can best be achieved in combination with continuous welded rail. However, until all the results of the SAL and ACL tests are in, railroad men will be waiting and hoping.

Special Clip

Each tie is fastened to the rails (132 lb. at Benson; 115 lb. at Tampa) with a specially developed spring clip. The width of the tie plate has been reduced approximately 35% to 5 in. and it is supported by a plywood pad which absorbs impact and provides electrical insulation for track circuits. The complete assembly of track hardware is secured by two 3/4 in. heat treated bolts inserted thread down into a recessed pocket on the underside of the tie. Each bolt exerts a 10,000 lb. clamping force which eliminates the need for installing rail anchors. In some instances a tapered wedge nut is being used. The nut is set in a performed wedge shaped hole half way through the tie and is designed to resist bolt tension through wedging action against the sides of the hole.

Competitive Cost

Although completely accurate cost figures are not available at this early stage, there is good reason to believe that "Tie E" can be competitive. Since the first designs left the drawing board the American Concrete Crosstie Corporation of Florida has developed a special machine capable

of mass producing one thousand ties per day. A mile-long section of the prestressed ties is expected to cost about \$2,000 more than a similar section constructed with wood ties. This figure does not take the all-important factor of service life and reduced maintenance into account.

At the present time American railroads must replace approximately 25million ties annually. The unit cost of these treated ties ranges from \$3.05 to \$4.50 and labor costs average about \$2.00 for placing a tie in track. Service life of these ties usually varies from 25 to 30 years.

These figures clearly emphasize the established fact that tie maintenance is currently a major expense item railroads must handle in the maintenance of track.

In the final analysis, the success of the prestressed tie will depend on performance, methods of manufacture and the regional status of the competitive market.



Vermiculite Inst. Meets, Elects McDiarmaid

New developments in vermiculite and allied products of interest to the construction industry were the main topic of discussion at the 19th annual meeting of the Vermiculite Institute of Chicago, held March 19 through 24 at Chandler, Ariz.

L. G. McDiarmaid of Vancouver, B. C., was elected to the presidency. C. H. Wendel of Los Angeles and L. K. Irvine of Salt Lake City, Utah, were named to the board of directors. Edward R. Murphy was returned as managing director. Walter J. Bein of Chicago was re-elected treasurer.

C. R. Babb, chairman of the concrete committee, presented a new data sheet and short form specification for a vermiculite roof system, recently firerated at two hours, that combines insulation, sound control, and fire protection in one economical "package." This is the only two-hour roof deck with exposed supporting members that is currently available to builders, Babb said.



L. G. McDiarmaid

He also announced that the Army Corps of Engineers at Washington, D.C., has just published a comprehensive new specification for vermiculite concrete roof decks over steel and various formboards.

L. J. Lambert, chairman of the insulation committee, reviewed recent

tests at Pennsylvania State University of concrete block walls with the cores filled with the new water-repellent vermiculite masonry fill. While insulating the cores increases the inside surface temperature of the entire wall, the fact that the tests show conclusively that no cold spots occur opposite the webs, or solid portions of the block, is of much greater importance, Lambert stated.

ASTM To Meet June 26 at Atlantic City

The 63rd annual meeting of ASTM will be held June 26-July 1 at Chalfonte-Haddon Hall, Atlantic City, N.J.

Among the papers at the session on concrete, June 27, are these: "The Effects of Early Freezing on Low-Density Aggregate-Type Concrete", "Testing Performance of Stationary Concrete Mixers", "Investigation of Alkali Reactivity of the Fine and Coarse Aggregates of Northern Illinois", "Performance Tests of Field Concrete Mixers", and "Influence of Physical Characteristics of Aggregates on Durability of Concrete".



Quotes

Continued from page 15

Swales has announced that he's opening such a plant there, on West Mission street,

Another new plant, one we know little about, will be built in West Hobart, Ind. A re-zoning okay has been given for a 40 acre site, but we have no names of either incorporators or company involved.

Another new plant is built, or being built, just east of Woodinville, Wash. The prestressed plant will make girders for use on a Seattle freeway.

Spectra-Glaze is moving into the newest state, Hawaii. The plant will be owned and operated by Consolidated Pacific Standard Co., Spectra-Glaze Div., our report says. Fred Nichols, of Consolidated, says the firm won't actually make the block, but will buy them from other producers and then add the S-G. The plant, with about 1,500 units handled in an 8-hour shift, should be operating by late this year.

Another 6 yard tandem unit has been added to the fleet of Bona-Fide Concrete Co., in Jackson, Mich. That makes it an 8-truck fleet. And talking about fleets we recently ran a story on McMichael Concrete in Tulsa, noting that they had the county's biggest bill for license plates. Now they've bought another 11 new dump trucks for use in the sand plants. These added another \$4,000 on the license bill, making it in excess of \$28,500. We could live on what they pay for license plates. We would like to.

Now, here's what some of the people are doing:

William T. Parr has joined Taylor Concrete Products Co., to handle sales in northern New York. He had been with Thomas H. Bradley, Inc., in Watertown, N.Y. The Taylor firm was bought in April by Abe Cooper, Raymond Frank, Francis G. Taylor and Manford H. Jerome

from the estate of the late Leland Taylor. The firm is in Watertown, N.Y.

James Ware, of Mo-Con Inc., a Fulton, Mo. ready mix firm has sold a part-interest in the business to Robert Adrain, who will serve as superintendent of the Mo-Con rock quarry.

Lou Mulhofer has joined the sales staff of Reading Concrete Products Co., in Cincinnati. He had been across the river, in Covington, Ky., with Alpha Portland Cement's local office.

Joseph J. Maly has joined the Omaha staff of Wilson Concrete Co., makers of pipe. He had been with an architectural-engineering firm.

American-Marietta Co. (and it's a slow month when they haven't merged with or bought someone) has named John Mahalechko as manager of the Fort Wayne, Ind., precast plant.

CUT COSTS. SPEED DELIVERIES WITH

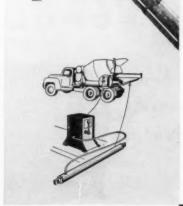
MONARGE POWER HYDRAULIC CONTROLS

raise, hold, or lower discharge chute in seconds . . . automatically

MONARCH DYNA-CHUTE provides hydraulic chute control for readymix trucks. Dyna-Chute positions the discharge chute on ready-mix trucks in seconds . . . automatically! With just a flick of the control handle, the chute is lifted, held, or lowered instantly and without effort. Monarch Dyna-Chute saves delivery time, and quickly maneuvers the chute into hard-to-get-to places. Dyna-Chute will handle three extension chutes with ease, will raise a ton or more when the mix is running. On load after load it pays for itself; helps reduce the possibility of injury.

Dyna-Chute is available as a complete control ready to install on all standard truck mixers. Assembly includes the 12 (or 6) volt power unit with pressure pump, oil reservoir case, solenoid, and directional valve, protective steel cover, insulated cable, hydraulic hose, single-acting ram, and miscellaneous fittings.

Wt. approximately 90 lbs.



Push-button operation is also offered in the S-PEH model. Just push the button to raise or lower; — it holds automatically in any position. Additional stations also available.



MONARCH ROAD MACHINERY COMPANY
1331 Michigan St., N.E., Grand Rapids 3, Michigan

CPMB Standards

Continued from page 21

ingredient to begin until all batchers have been cleared of the preceding batch and the scales returned to zero, nor the discharge of any ingredient until the weighing of all ingredients has been completed. A batching system which employs interlocking of one or more batchers, but lacks any of the features of complete interlocking, shall be designated as partially interlocked.

- (a) A MANUAL BATCHING SYSTEM shall consist of the required combination of individual standard manual batchers.
- (b) A PARTIALLY AUTOMATIC BATCHING SYSTEM shall consist of the required combination of batchers, at least one of which, other than the water batcher, shall be a standard semi-automatic or automatic batcher. Interlocking in any degree shall be optional.
- (c) A SEMI-AUTOMATIC BATCHING SYSTEM shall consist of the required combination

- of standard semi-automatic batchers or of standard semi-automatic and automatic batchers. The system shall be completely or partially interlocked.
- (d) An AUTOMATIC BATCHING SYSTEM shall consist of the required combination of standard automatic batchers. All batchers in the system must be actuated by a single starting mechanism. The system shall be completely interlocked.
- (e) An AUTOMATIC BATCHING SYSTEM WITH MIX SELECTION shall consist of an automatic batching system as defined above with additional equipment to permit the selection of a minimum of three preset mixes, each by the movement of not more than two switches or other devices.

b. BINS OR SILOS. A bin or silo shall consist of a suitable container for storing aggregate or cement and, in the case of the latter, protecting it from moisture. Bins or silos shall be designed structurally in accordance with the current specifications of the American Institute of Steel Construction or the American Society for Testing Materials.

Continued on page 36

PRASCHAK 75 CUBIC FOOT AMERICA'S POPULAR MIXER

Complete With 60 H.P. Motor Drive —

\$5880.00

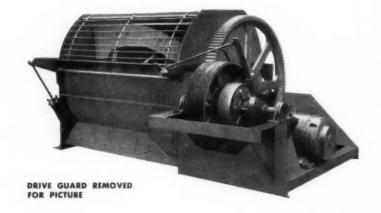
AVAILABLE WITH RIGHT OR LEFT HAND DRIVE

Write For Details

FIVE OTHER MODELS

- 8 Cu. Ft, LESS MOTOR
 AND DRIVE \$ 750.00
- 16 Cu. Ft, LESS MOTOR
 AND DRIVE\$ 990.00
- 21 Cu. Ft, LESS MOTOR
 AND DRIVE\$1115.00
- 30 Cu. Ft, LESS MOTOR
 AND DRIVE\$1480.00
- SO Cu. Ft, COMPLETE WITH CLUTCH, 30 H.P. MOTOR, AND DRIVE\$3515.00

(COMPARE THE MIXER, NOT THE PRICE!)



ALL MODELS AVAILABLE FROM STOCK WITH MOTOR,
MOTOR MOUNT, AND DRIVE — Complete!

PRASCHAK MACHINE CO. MARSHFIELD, WIS.

HUNDREDS HAVE ORDERED!

MANY HAVE RE-ORDERED ON SEEING IT!

NEW
ENLARGED
SECOND
EDITION

Block producers who have bought the Second Edition of William Grant's famous book are lavish in their praise of the new material included and the updating of subjects that were covered in the first edition. Many have reordered enough copies for each of their key people.

We suggest you order today on a money-back guarantee of satisfaction. Payment with your order please.

MANUFACTURE OF by WILLIAM GRANT CONCRETE MASONRY UNITS

More Pages • More Subjects Covered • More Illustrations Charts and Tables • More of Everything that Made the First Edition the Most Popular Book on the Subject Ever Offered the Block Producer.

\$5.00

POSTPAID

ORDER YOUR COPY TODAY-

CONCRETE PUBLISHING CORP.

400 WEST MADISON ST.

CHICAGO 6, ILL.

PAYMENT MUST ACCOMPANY ALL ORDERS



Here's a brush coat masonry finish that actually fills all voids . . . halts capillary action, seals off microscopic air holes. Formulated to withstand oil, alkali, water, or smoke. Stable under heat or frost.

Quickly soluble Agraseal is easy to mix. has no lumps and there is no hair or alli-

has no lumps and there is no hair or alti-gator checking, no powdering. Can be brushed or sprayed on. Cures fast, saves days on every job. Easiest of all water repellent coverings to use— just add water! Packed in 25 and 100 lb. drums. White also available in 8-lb. cans. Comes in white and 9 smart decorator colors, all blendable for special effects. A gallon covers 50-75 square feet. For further information and samples write

amms INDUSTRIES CO. 228 North LaSalle Street . Chicago 1, Illinois

WHERE YOUR BUSINESS IS APPRECIATED!



EDMONT CASE NO. 627: Handling concrete and cinder block, a leather palm glove lasted only one shift. No. 362 Grappler, Extracoated with Edmont's exclusive heavy duty Durox, wore 7 shifts, reducing glove costs from 621/2c to 14c per man-shift.

"Extracoated" glove cut costs 77%



dmont GLOVES

In the case above, each dozen jobfitted gloves saves this plant \$5.82 in glove replacement costs. The Grappler glove has outstanding resistance to abrasion and snagging. It outwears leather; outwears ordinary plastic up to 50%. The uncoated back lets glove breathe for warm weather comfort.

Free Test Offer to Listed Firms: us your operation and materials handled. From more than 50 types, we will recommend the correct glove and send samples for on-the-job comparison test.

Edmont Manufacturing Company 1206 Walnut Street, Coshocton, Ohio In Canada write MSA, Toronto

CPMB Standards

Continued from page 34

- (1) BINS OR SILOS, AGGREGATE. Aggregate bins or silos shall be designed to contain rated capacity loads of material weighing 110 pounds per cubic foot. Rated capacities, as shown on the rating plate, shall be stated in terms of cubic yards of aggregate. In addition, they may be stated in tons based on material weighing 110 pounds per cubic foot. The rated capacity of a bin or silo shall not exceed its water-level volume plus the volume represented by the frustum of a cone or pyramid above the top of the bin, sloping from the perimeter of the bin at an angle of 40 degrees from the horizontal, to a vertical height equal to 25 percent of the minimum width of the bin at its top.
- (2) BINS OR SILOS, CEMENT. Cement bins or silos shall be designed to contain rated capacity loads of material weighing 94 pounds per cubic foot. Three capacities shall be shown on the rating plate attached to the bin or silo, as follows:

GROSS AIR VOLUME in cubic feet;

MAXIMUM CAPACITY in barrels computed from the gross air volume assuming a barrel of cement to occupy 4.0 cubic feet; MINIMUM CAPACITY in barrels computed from the gross air volume assuming a barrel of cement to occupy 4.8 cubic feet.

- (3) BINS OR SILOS, COMBINATION, Bins or silos for the storage of both aggregates and cement shall be designed and their capacities computed and stated on the rating plate separately for aggregate and cement in accordance with the applicable provisions of Subparagraphs (1) and (2) above.
- c. Conveying Equipment. All conveyor capacities, as shown on the rating plate, shall be based on the equipment being uniformly and continuously fed.
 - (1) CONVEYOR BELTS FOR AGGREGATES shall conform to the current standards of the Conveyor Equipment Manufacturers Association. Rated capacities, as shown on the rating plate, shall be stated in tons per hour calculated on the basis of those standards, assuming the material to weigh 100 pounds per cubic foot.

- (2) BUCKET ELEVATORS FOR AGGREGATES shall have their rated capacities, as shown on the rating plate, stated in terms of tons per hour computed by assuming that the buckets are filled to 75 percent of their actual cubical capacity with material weighing 100 pounds per cubic foot.
- (3) BUCKET ELEVATORS FOR CEMENT shall have their maximum and minimum rated capacities, as shown on the rating plate, stated in terms of barrels per hour computed on the assumption that the buckets are filled to 100 percent of their water level capacity. For MAXIMUM RATED CAPACITY, a barrel of cement shall be assumed to occupy 4.0 cubic feet and for MINIMUM RATED CAPACITY, 4.8 cubic feet.
- (4) OTHER CONVEYORS FOR CEMENT, such as screw conveyors, slides, and pumps, shall have their maximum and minimum rated capacities, as shown on the rating plate, stated in terms of barrels per hour computed from the guarantee of volumetric capacity by the manufacturer of the conveyor. For MAXIMUM RATED CAPACITY, a barrel of cement shall be assumed to occupy 4.0 cubic feet and, for MINIMUM RATED CAPACITY, 4.8 cubic feet.

Member Companies

EFFECTIVE MARCH 1, 1960

BLAW-KNOX Co. Construction Equipment Div. Mattoon, Ill.

BUTLER BIN Co. Waukesha, Wis.

CHAIN BELT Co. Milwaukee, Wis.

Erie Strayer Co. Erie, Pa.

THE HELTZEL STEEL FORM & IRON CO. Warren, Ohio

THE C. S. JOHNSON Co. Champaign, Ill.

Noble Co. Oakland, Calif.





Photo courtesy L. O. Gregory Mfg. Co., Memphis, Tenn.

RELIABLE .. DEPENDABLE .. DURABLE

Cardinal HOPPER SCALES
Built to YOUR SPECIFICATIONS!

For complete information write Dept. C



You can depend on Cardinal Suspension Hooper Scales for top efficiency in weighing cement and aggregates. Both Beam or Dial Type available with manual, semi-automatic operation. Adaptable for any hopper ... can be installed to suit any requirement. Capacities from 500 lbs., to 100,000 lbs.

CLASSIFIED ADS-

\$10.00 per column inch. Closing date for classified advertising copy is 4th of preceding month.

FOR SAIR

Block plants in different parts of the United States, Canada and Mexico. Some of these are good buys for cash, others can be bought with a small down payment for the equity or a good experienced plant manager with about \$10,000 can buy an interest.

BOX A-90, care CONCRETE 400 W. Madison St., Chicago

FOR SALE

Block plant in Southern Florida. Can be had for approximately half of the original investment. Block making machinery has been used less than 6 months. Easy terms to the right party.

BOX A-89, care CONCRETE W. Madison St., Chicago 6, III.

FOR SALE

35' coment bucket elevator. 45' 9" coment screw. 15' under-track coment screw. Equipment 2½ years old. Used very little.

CRONIN & ARCHER d. Phone: Bel Air 581 Bel Air, Md.

SELL OF TRADE

27E Rex skip load cement mixer, gas, self-pro-pelled, has new drum, good for pouring septic tanks or for bridge builders. \$500.00.

FARLEY CONCRETE, INC. Eckel Jct. Rd. Perrysburg, Ohio Phone: TRinity 4-4707

FOR SALE

Two Truck-Man platform trucks, one used only a few hours. One 1956 Clark Ross truck. Flat forks, excellent condition. One FK-50 5,000 lb. Erickson lift truck, six cubing forks, sideshifter, power steering. One 18 hp. steam low pressure boiler, oil fired, with burner and controls. All this equipment is in good condition and priced for quick sale

H. G. RAPLEY, SALES 931 Wall Street Street Port Huron, Mich. Phone: YUkon 2-0539

SALESMAN

Concrete pipe plant trade Florida, Ga., Ala., Miss., Louisiana. Profitable sideline. Some established business. Good house. Minimum competition. Reasonable commission. Will consider man covering smaller area. California and Arizona open.

BOX A-88, care CONCRETE 400 W. Madison St., Chicago 6, III.

PALLET CLEANING

No Need to Shut Down — Latest Type Machine Serving the South at Your Plant.

SOUTHEASTERN PALLET CLEANING SERVICE 5920 Terry Parker Drive North Jacksonville, Florida.

PHONE: RAymond 4-4676 or ELgin 6-7957

For Cement and Concrete

COLOR YOUR CONCRETE WITH LANSCO CEMENT COLORS, available in 40 ATTRACTIVE shades. Suitable for all types of concrete products. Write for our new color card, copy of "Suggestions For Using Cement Colors," and for free samples and price list.

Manufactured by:

LANDERS-SEGAL COLOR CO.

76 Delavan St. . Brooklyn 31, N.Y.

PLAIN PALLET CLEANING

We truck our machine to your plant and supervise entire cleaning and planing off of pallet residue. No need to shut down as we will keep up with production.

EDWARD A. LOBSTEIN 31521 Cyril Drive Fraser, Michigan. Phone: Prescott 2-1135

E. L. CONWELL & CO.

Established 1894

ENGINEERS . CHEMISTS

INSPECTORS

Coment, Chemical and Physical Laboratories Tests of Coment, Concrete, Sand, Steel, Cement Block, Cement Brick. Chemical Analyses of All Commercial Products, Complete Technical Supervision of Central Mixed Concrete Plants.

2024 ARCH ST. . PHILADELPHIA, PA.

SWAP-BUY-SELL

BLOCK MACHINES

–12 cu. ft. Stearns Mixers with motors, good condition \$ 600.00 ea.

1—Haiss Bucket Leader on rubber. Le Roi Engine — very good condition 2.950.00

-#7 Jeltcrete, all motors, 3 mold boxes 900.00

#9 Joitcrete, all motors, 3 old boxes

100,000 pressed steel pallets in stock (Send tracing or sample for quotation)

WRITE . WIRE . PHONE Mr. McCaughey

Send in list of equipment you need. If we don't have it in stock, we usually know where we can find it at a bargain.

GENERAL ENGINES CO., INC. Route 130 Phone: Tilden 5-5400

Thorofare, N. J.

POR SALE — CONCRETE TRUCK MIXERS

(As is — subject to prior sale)

One 2 yd. horizontal drum Jaeger — \$300.00

One 5 yd. 1950 Challenge on 1952 Ford with

Cook Chain Drive Tandem — \$2,000.00

One 5 yd. 1952 Jaeger on GMC Tandem —
\$3,850.00

Two 6 yd. 1954 Smiths on 1955 B42 Macks, ea.
— \$7,850.00

CONCRETE TRANSPORT MIXER CO.
4983 Fyler Avo.

Phone: Flanders 2-7800

FOR SALE

Ready Mix Concrete Equipment

hauled ... 3,000.00

2 1953 452-30 GMC Tandems with Rex 3½
cubic yard mixers, fluid couplings, recently sandblasted and painted, good
rubber. Good overall condition, operating daily ... 3,500.00 each

2 1949 K7 International trucks with 2 cubic
yard Smith Mixers. Mixer and truck
engines recently overhauled. Need Paint
1,000.00 each

1,000.00 each

TERMS AVAILABLE

BURTON BLOCK COMPANY P.O. Box 146 Burton, S.C.

ONE SUPERIOR SKIP BUCKET **DOUBLES EFFICIENCY!**



WEIGHT -10 CUBIC FOOT BUCKET FEATURES:

 Finger tip control
 Wheel and chain pouring gives operator maximum control All welded construction

perfect pouring for tanks, vaults and other special forms.

write, wire or coll

SUPERIOR CONCRETE MACHINE CO.

5352 WEST BROAD STREET, COLUMBUS 4, OHIO

and fastest

way

for

pouring

Huron Names Engelman

Huron Portland Cement Co., Detroit, has announced the appointment of A. E. Engelman as technical service engineer for the Wisconsin division. He'll help Huron customers in Wisconsin and upper Michigan with cement and concrete problems.

Master Builders Expands with Salt Lake City Office

To meet increased sales and field service activities in the Utah, Idaho territory, The Master Builders Co. has announced opening of a branch office at 341 S. Main st., Salt Lake City, Utah, with Martin J. Switters named field representative.

PALLETS NEED CLEANING?

Our operator trucks cleaner to your plant. Approximately 300 plain steel paliets in popular sizes cleaned per hour. No interruption in produc-

FRASER PALLET CLEANING Rine Pries-Gerard DeVolder-Glen Schroeder
P. 0. Box 114 Fraser, Michigan
PHONE: PRescott 2-9722

Chain Belt Signs Agreement with Crane

The signing of an exclusive agreement with Crane Carrier Corp., Tulsa, Okla., granting rights to market carriers for the concrete industry has been announced by Chain Belt Co., Milwaukee. It was also announced that the carriers will be marketed as a Rex Mixer-Master line

As a result of the agreement, CB is now able to market a carrier and mixer package, combining CB'S Rex Mixer and the CC Mixer-Master unit.

Largent Named Distrib. by Dewey and Almy

Walter W. Largent Co., of Kansas City, Mo., has been made distributor for western Missouri and Kansas by the Dewey & Almy Chemical Div., W. R. Grace & Co.

Heltzel Appoints Coppock in SW

J. W. Coppock Jr. has been appointed Southwest regional representative by The Heltzel Steel Form & Iron Co., Warren, Ohio, representing the complete Heltzel line.

Marquette Appoints Lacasse in Midwest

Henry J. Auer, Chicago area sales manager for Marquette Cement Manufacturing Co. has announced the appointment of George J. Lacasse as sales representative for Marquette in west-central Illinois and southeastern Iowa.

He will make his headquarters in Peoria, Illinois.

Lacasse's territory had formerly been covered by Gregory Meyer, who passed away earlier this year.

EZY-STRYP®

METAL FORMS

For Concrete Specialties

Box 4167-5

R. L. SPILLMAN CO. Columbus 7, Ohio

SELL YOUR USED EQUIPMENT THROUGH CONCRETE'S CLASSIFIED PAGES



USE Pace-setter aluminum basement window is a complete packaged window. Call or write us for complete information.

Ask your jobber, or write us

COLE-SEWELL ENGINEERING CO.

2288 UNIVERSITY AVE.

ST. PAUL 14, MINNESOTA

SMITHKO CEMENT COLORS

- · The Standard of Comparison for Forty Years
- 65 Shades to Choose From Including Many **New Colors**

Send For Latest COLOR CARD. Samples, Technical Brochure, and Quotations.

SMITH CHEMICAL & COLOR CO. 53-57 John St., Brooklyn 1, N.Y. No Matter What SIZE...



No Matter What SHAPE



QUINN CONCRETE PIPE FORMS

Set The STANDARD For Producing Quality Pipe!

Over 50 years of experience go into the production of every Quinn Concrete Pipe Form. That's why the Quinn Heavy Duty form is recognized as the STANDARD the world over for producing quality concrete pipe at the lowest cost. Used in making pipe by vibration, spading, or tamping. Sizes for pipe 10° to 120° and larger. Tongue and groove (as shown) or bell end pipe in any length desired. No matter what size, ahape, or length pipe you need, there's a Quinn pipe form made to fit your requirements. Write today for our FREE catalog and estimates.





NON-SLIP CONCRETE



INSTALL NON-SLIP AND EXTREMELY WEAR RESISTANT SIDE-WALKS AND SURFACES BY APPLYING HARD ABRASIVE GRAINS

Two Grades





Many Uses

SWIMMING POOLS * SIDEWALKS WAREHOUSES * SCHOOL GROUNDS RAMPS * STAIRWAYS * ETC.

FRANK D. DAVIS CO.

Eastern Office NIXON, NEW JERSEY . CHarter 9-8191

For QUICK RESULTS

put your problem in CONCRETE'S Classified Ad Section TOPS FOR:

- Buying and selling used equipment.
- Finding experienced help.
- Locating the job you want.

The cost is low—\$10.00 per column inch. All classified ads are sold in even inch multiples. Closing date for all classified ads is the 4th of preceding month. Box numbers available at no extra cost on request.

SEND YOUR AD IN TODAY TO:

CONCRETE PUBLISHING CORP.

400 W. Madison St.

Chicago 6, III.

ADVERTISER'S INDEX

R1	Alpha Portland Cement Company 1
R2	Bergen Machine & Tool Co., Inc
R3	Besser Company
R4	Besser Company Back Cover
R5	Cardinal Scale Manufacturing Company
R6	Chicago Fly Ash Company
R7	Cole-Sewell Engineering Company
R8	Columbia Machine, Inc
R9	Concrete Transport Mixer Company
R10	Conwell & Company, E. L
R11	Curtiss-Wright Corporation 6 & 7
R12	Davis Company, Frank D
R13	Detroit Edison Company
R14	Durant Manufacturing Company
R15	Edick Laboratories, Inc
R16	Edmont Manufacturing Company
R17	Erickson Power Lift Trucks, Inc
	Fraser Pallet Cleaning
	Gocorp Inside Front Cover
	Handy Company, Inc., Walter N
	Jaeger Machine Company 12 & 13
R22	Kent Machine Company
R23	Landers-Segal Color Company
R24	Lobstein Pallet Cleaning
R25	Manufacturers Equipment Company
R26	Milwaukee Fly Ash, Inc
R27	Monarch Road Machinery Company
R28	McNeil Brothers, Inc
	Oswalt Engineering Service Corp
	Praschak Machine Company
	Quinn Wire & Iron Works
	Smith Chemical & Color Company
833	Southeastern Pallet Cleaning Service 38
R34	Spillman Company, R. L
235	Stearns Manufacturing Company Inside Back Cover
136	Superior Concrete Machinery Company 38
137	Syntron Company
138	famms Industries Company
	Teale & Company
	Frinity Div., General Portland Coment Co
	West Penn Power Company

THE OF THE AUTOMATED BLOCK PLANT

THE ELECTROMATIC

high production quality block.

THE 60 CU. FT. MIXER

of properly mixed batch.

ask any owner

STEARNS

MANUFACTURING COMPANY - INC.

ADRIAN - HICHIGAN - HSA

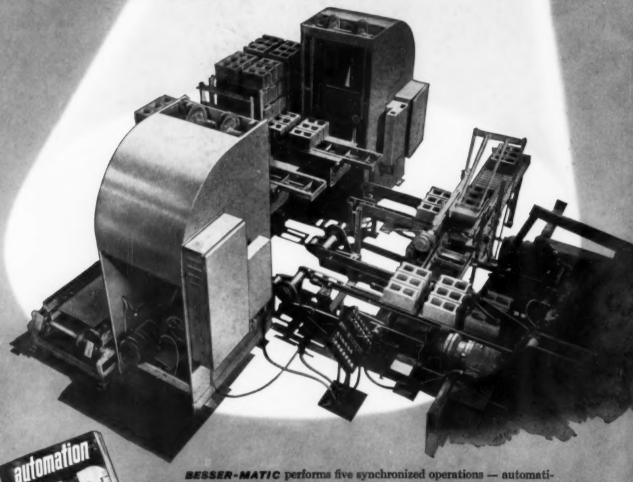
SO CU. FT.

The ideal materials handling conveyor for the Electromatic and Direct Drive mixer.

The Industry's Spotlight is on

BESSER-MATIC

You want to produce high quality block, faster, using a minimum of production workers. Today, you can do that with BESSER-MATIC — the worthy companion machine to the automatic VIBRAPAC. Both machines installed in your plant enable you to produce high quality concrete masonry units with speed and economy. The VIBRAPAC, plus BESSER-MATIC, is truly the answer to a blockmaker's prayers.



cally. Just push a button and the machine loads green block ... indexes new rack ... unloads cured block ... depallets cured block ... and returns empty pallets. BESSER-MATIC eliminates both off-bearer and power hoist ... minimizes the number of cull block ... allows for better inspection ... promotes block plant safety. BESSER-MATIC was designed, developed and field-tested by BESSER Company, manufacturers of the world-famous Vibrapac machine.

for your copy of Bulletin "AUTOMATION for Block"AUTOMATION for Blo

FIRST IN CONCRETE BLOCK MACHINES



Investigate BESSER-MATIC Write for your copy of Bulletin No. 132 "AUTOMATION for Block Plants". It gives you the success story of a prominent blockmaker who has put BESSER-MATIC through its paces.

